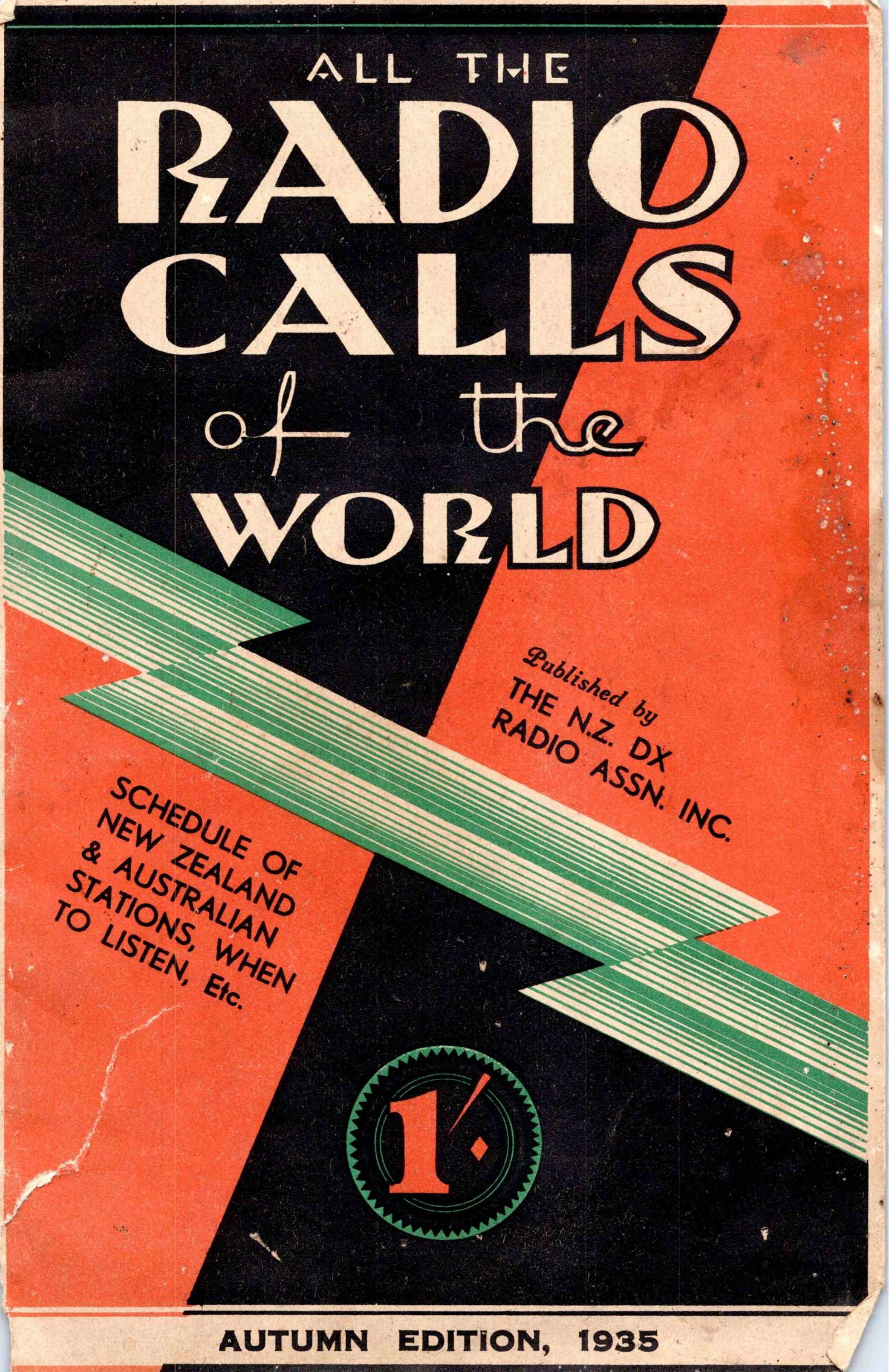

ALL THE

RADIO CALLS of the WORLD

Published by
THE N.Z. DX
RADIO ASSN. INC.

SCHEDULE OF
NEW ZEALAND
& AUSTRALIAN
STATIONS, WHEN
TO LISTEN, Etc.

1/-

AUTUMN EDITION, 1935

ALL THE
RADIO CALLS
OF
THE WORLD

Compiled by the N.Z. DX Radio Association Inc.

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AUTUMN EDITION, 1935

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MAINLY ABOUT OURSELVES

WE are proud to be able to present, both to the general listening public, and to our fellow-members of the N.Z. DX Radio Association, a second edition of "RADIO CALLS of the World."

The labour entailed in the composition of our First Edition was prodigious, far greater than we had ever expected, but the return has amply rewarded us. We claim it is no mean feat to produce an index containing the call signs, locations, and frequencies of 1389 stations on the broadcast band and 195 stations on the Shortwave bands, all these stations situated in all the four quarers of the globe. In view of the magnitude of this task, we take pride in the fact that the test of time and searching examination by enthusiasts all over New Zealand has revealed only four or five minor errors of detail at the time of the publication of "Radio Calls."

Our old edition is now obsolete. A new edition is urgently needed by all listeners who desire to be up-to-date in their information.

Our Second Edition has entailed no less than six or seven hundred alterations, either in frequency, power or location of stations, listed in our First Issue. In addition, some 90 odd new stations in different parts of the world have been added. All these alterations and additions have been rendered necessary by the march of time. So radio progresses onward, ever onward, and we must, of necessity, keep up with its advance.

Particular care has been taken with the composition of our Shortwave section, but we desire to emphasize the transitory nature of many of the schedules attached to this section.

Actually 75% of these schedules, which were correct six or seven months ago, have needed amendment in this, our second, edition. Therefore, we would warn our readers that no Shortwave schedule can be guaranteed. It may be that further alteration has been made between the time of the last reading of our page proofs and the actual removal of the book from off the Printing Presses!

With this edition we present several new features, not the least of which are a complete chart of main radio stations on a sheet that can be pinned on the wall, and a list of times and seasons to listen in to the world.

We would like to thank all those members of the general listening public who have appreciated and supported our first effort to publish a complete and accurate list of "Radio Calls of the World", the most accurate and most comprehensive ever published in the Southern Hemisphere.

To those who are new to the nature and the activities of the N.Z. DX Radio Association, may we tell you something about ourselves.

Some two years ago, in January 1933 to be exact, many prominent N.Z. DXers became greatly dissatisfied with the service of information and advice concerning reception of overseas stations with which they had had to be content. Thus it was decided to organise a properly incorporated society, run on democratic and non-commercial lines, to foster the hobby of listening to overseas stations.

A conference was held and a legal constitution drawn up and registered with the authorities, a democratically elected Headquarters formed and an official publication registered to supply enthusiasts with the latest and best information available. This publication, known as "Tune In", was on sale for some 18 months and met with general approval.

So great was this approval that the Editors felt the time was ripe to launch out in an endeavour to reach a larger public. To this end, about six months ago, arrangements were made with the "N.Z. Radio News" to incorporate a "Tune In" section, edited and run by the original Editors of "Tune In", in their monthly magazine. This section met with splendid success, but, unfortunately, "Radio News", just as we go to press, has decided to discontinue circulation. Arrangements are now well in hand to publish "Tune In" as a monthly with the first issue out on May 1st. and thereafter on the first day of each month. It is quite likely that the bi-monthly publication of "Tune In" will be reverted to before long. The present issue will contain 28 pages, and its cost will be Ninepence postpaid, 8/- per annum or 4/3 per half year.

As well as those contained in its monthly organ, weekly tips are broadcast by 4ZM Dunedin 1050 kc. (Saturdays 10 p.m.), 3ZM Christchurch 1470 kc. (Thursdays 7.30 p.m.), 3ZR Greymouth 940 kc. (Fridays 9.45 p.m.), 1ZM Auckland 1260 kc. (Fridays 8 p.m.)

When the N.Z. DX R.A. was started it had only two properly organized branches, namely one in Christchurch and one in Dunedin. Now some two years later its membership is fast approaching the millennium mark and it has established branches in Auckland, Napier, Hastings, Waipukurau, Palmerston North, Wellington, Christchurch, Rangiora, Dunedin and Invercargill, not to mention an overseas branch in Adelaide, South Australia, and numerous representatives in the main parts of the British Empire, the U.S.A., and Great Britain itself.

In addition, in most of the main towns in N.Z. and in the five centres in Australia, efficient secretaries look after the interests of the N.Z. DX R.A. All these representatives continually supply up-to-date information for the benefit of N.Z. listeners.

The N.Z. DX R.A. is concerned with all the practical problems which are of interest to the listener to overseas stations, such as the elimination of interference, the publication of up-to-date information, the arranging of special programmes from overseas stations, and the assisting of those who are in doubt concerning the identity of overseas Broadcasting Stations heard in N.Z.

We claim the N.Z. DX R.A. is the only properly constituted organization in N.Z. or Australia for the fostering of reception of overseas stations. We have no particular commercial interests to consider and we are the only legally incorporated society of DXers in either of these two countries.

In these days solidarity is necessary to progress and we feel a large and powerful organization of DXers, such as the N.Z. DX R.A., is of great value to listeners, and we therefore would earnestly solicit the support of all interested in overseas reception. Help us to make the N.Z. DX R.A. really representative of all such listeners by joining up with the Association. Membership costs only 2/6, which includes registration and the free issue of a Badge and Certificate of Membership.

We can help you with: 1. Advice. 2. Information concerning stations. 3. Information about reception conditions. 4. Organization of special programmes from distant stations. 5. Publication of topical information of interest to DXers.

You can help us by: 1. Enrolling. 2. Becoming an enthusiastic member of the N.Z. DX R.A.

If you have found this "call book" of value to yourself help the Association, which makes possible the publication of such information, by supporting it with your membership. Join now by filling in the form provided on the cover of this book and forward same as early as possible to the Headquarters Secretary, Mr. N. C. Manchester, 88 McFadden's Rd., Christchurch.

LETTER POSTAGE RATES

Argentine	1d.
Australia	1d.
Austria	2½d.
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Taken from Official Post Office Guide. Corrected to 31st March 1935

WHEN TO LISTEN . . .

EAST AUSTRALIA

January	10.00 p.m.-1.30 a.m.
February	9.30 p.m.-1.30 a.m.
March	8.30 p.m.-1.30 a.m.
April	8.00 p.m.-1.30 a.m.
May	7.00 p.m.-1.00 a.m.
June	6.30 p.m.-1.00 a.m.
July	7.00 p.m.-1.00 a.m.
August	7.30 p.m.-1.00 a.m.
September	8.00 p.m.-1.00 a.m.
October	9.00 p.m.-1.30 a.m.
November	10.00 p.m.-1.30 a.m.
December	10.30 p.m.-1.30 a.m.

VK AMATEURS

April	12.30 a.m.-3.00 a.m.
May	12.00 p.m.-2.30 a.m.
June	12.00 p.m.-2.30 a.m.
July	12.00 p.m.-2.30 a.m.
August	12.00 p.m.-2.30 a.m.
September	12.00 p.m.-2.30 a.m.

WEST AUSTRALIA

April	12.00 p.m.-3.00 a.m.
May	11.00 p.m.-2.30 a.m.
June	10.30 p.m.-2.30 a.m.
July	11.00 p.m.-2.30 a.m.
August	11.30 p.m.-2.30 a.m.

JAPAN

March	11.00 p.m.- 1.00 a.m.
April	10.30 p.m.- 1.00 a.m.
May	9.30 p.m.-12.30 a.m.
June	9.00 p.m.-12.30 a.m.
July	9.30 p.m.-12.30 a.m.
August	10.00 p.m.-12.30 a.m.
September	10.30 p.m.-12.30 a.m.
October	11.30 p.m.- 1.00 a.m.

THE EAST

April	1.30 a.m.-4.00 a.m.
May	12.30 a.m.-3.30 a.m.
June	12.00 p.m.-3.30 a.m.
July	12.30 a.m.-3.30 a.m.
August	1.00 a.m.-3.30 a.m.
September	1.30 a.m.-3.30 a.m.

INDIA

Rarely heard in New Zealand

SOUTH AFRICA

Rarely heard in New Zealand

EUROPE

March (1st half)	4.30 a.m.-6.00 a.m.
March (2nd half)	5.00 a.m.-6.30 a.m.
April (1st half)	5.30 a.m.-7.00 a.m.
August (2nd half)	5.00 a.m.-6.30 a.m.
Septem. (1st half)	4.30 a.m.-6.00 a.m.
Septem. (2nd half)	4.00 a.m.-5.30 a.m.

SOUTH AMERICA

Rarely heard in New Zealand

NORTH AMERICA

January	11.30 p.m.-3.00 a.m.
February	7.00 p.m.-8.00 p.m.
	11.30 p.m.-2.30 a.m.
March	6.30 p.m.-8.00 p.m.
April	6.00 p.m.-8.00 p.m.
May	5.00 p.m.-7.30 p.m.
June	4.30 p.m.-7.30 p.m.
July	5.00 p.m.-7.30 p.m.
August	5.30 p.m.-7.30 p.m.
September	6.00 p.m.-7.30 p.m.
October	7.00 p.m.-8.00 p.m.
(2nd half)	11.30 p.m.-2.30 a.m.
November	7.30 p.m.-8.00 p.m.
	11.30 p.m.-3.00 a.m.
December	11.30 p.m.-3.30 a.m.

For Listeners in a Good Locality

East Australia:
30-60 minutes earlier, also May to July 7.30-9.30 a.m.

VK Amateurs:
March and October 12.30 a.m.-3.00 a.m.

West Australia:
30-60 minutes earlier, also March 12.00 p.m.-3.00 a.m. September 11.30 p.m.-2.30 a.m.

Japan:
30-60 minutes earlier, also November, December, January and February 11.30 p.m.-1.00 a.m.

The East:
30-60 minutes earlier, also October, November, February and March 1.30 a.m.-4.30 a.m.

India:
May, June, July and August 2.30-5.00 a.m.

South Africa:
May. June, July and August 4.00-7.00 a.m.

Europe:
February and October 3.30-5.30 a.m.

South America:
April (2nd half) May, June, July and August 2.30-5.00 p.m.

North America:
30-60 minutes earlier in the evenings, 30-60 minutes later in the mornings, also March, September (2nd half) and October (1st half) 11.30 p.m.-2.30 a.m.. October to March Morning Stations on Eastern Daylight Saving Time 1 hour earlier. Sundays October to March Special Programmes 8.00 p.m.-10.00 p.m.. U.S. Frequency Tests on the first seven days of each month 7.00-12.00 p.m.

HOW TO REPORT CORRECTLY

ONCE upon a time, in the dim past of radio's history, the receiving of a report from some listener across the seas was quite an event in the humdrum life of a broadcasting station. In those far off days such reports were eagerly received and acknowledged, and a verification sent to the listener who reported reception, provided sufficient evidence was given.

In these days, however, increased power of stations and enhanced performance of radio sets have completely changed the position. The more powerful radio stations on the Broadcast Band receive reports from all over the world. This fact makes the stations concerned all the more critical of reports sent to them.

This article, therefore, is mainly addressed to those listeners who have recently become interested in the reception of radio stations overseas. Reporting to such stations is naturally a two-sided affair. Firstly, the report should supply the transmitting station with as much technical information as possible upon the signals received. Secondly, it should contain some positive evidence by which the station can identify its particular transmission, thus enabling it honestly to verify such reception.

The technical information supplied should include the local weather conditions; direction and strength of wind; condition of the sky (clear, overcast, raining, etc.); barometer reading (noting whether it is rising or falling); and type of weather (cyclone, anti-cyclone, or westerly depression etc.) experienced at the receiver's location.

Next the signal strength should be given, and be denoted by a scale R0-9. It is here that difficulties arise as listeners have different ideas of strength, but a thorough knowledge of this scale should enable listeners to report accurately.

R0—No signal audible. (This condition often occurs during bad fades)

R1—Carrier wave just audible.

R2—Very faint signal.

R3—Weak signal.

R4—Rather poor signal.

R5—Fair signal, medium strength.

R6—Moderately loud signal, well above half speaker strength.

R7—Quite a strong signal, distinctly audible well away from the speaker

R8—Exceptionally strong signal, audible all over the house.

R9—Overloading Signal. (Applicable to local stations or exceptional reception from stations such as KFI or A Class Australians on a very good night, also the Empire and Paris S.W. Stations under particularly good conditions).

Signal strength is not affected by static or interference as these merely raise the noise level.

The next item is readability which is denoted by QSA0-5. The scale runs as follows:—

QSA0—Nothing understandable.

QSA1—Just readable enough to be able to know whether music or speech is in progress, but insufficient to distinguish the type of music. (e.g. whether orchestra, piano, singing, violin, etc).

QSA2—Sufficiently readable to understand whether orchestra, singing, man or woman speaking, but with speech readable only in isolated words.

QSA3—Fairly readable. Speech readable in patches through a background of noise.

QSA4—Quite readable, although occasionally portions of speech or music are not quite followed.

ALL INTERESTED IN THE RECEPTION OF DISTANT
STATIONS SHOULD SUBSCRIBE TO

"TUNE IN"

The only magazine in the Southern Hemisphere
devoted solely to DX enthusiasts and
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BOOKSELLER OR RADIO DEALER

QSA5—Perfectly readable, every word absolutely distinct.

Now the R code should apply to the carrier strength mainly, independent of the modulated signal, and may be consistent through several items or for the whole of the programme, while QSA frequently varies from speech to music and between different classes of music, and this is a point stations require to know. For example take the following items from a VK amateur:—

Call and address	R5	QSA2
Band March	R5	QSA4
Call	R5	QSA3
Violin solo	R5	QSA5
Call	R5	QSA3

The strength of signal remains constant in this example, but the readability varies quite a bit. Again the QSA may easily be higher than the R figure, e.g. one sometimes hears VK5IV at R3, but QSA5 owing to his perfect modulation. Both R and QSA are best entered in the report against each item reported.

The quality of tone should be reported. In this connection it is sufficient to say whether the tone is good and clear, rough and garbled, and whether deep or high.

Another point of importance to station operators is the question of fading, and this is best entered against each item of the programme reported, if at all possible. The descriptions required are slight fade, fairly deep fade (when the programme is not wholly lost), and complete fade (when the programme is entirely lost). The period of the fade should be noted; that is, how long the fade lasts. The following will be sufficient:—Very slow fade (lasting several minutes), slow (one minute or so), fairly rapid (several seconds), and very rapid (one second or less). If the fading occurs regularly it should be noted with the period between fades, or it may be irregular. In this connection a swinging aerial may be responsible for fading.

Static should be reported as—slight, bad or very strong. It is best to describe interference and give its nature if known. Both static and interference may cover the whole report, as they usually remain fairly constant during reception.

It is very necessary to outline the details of the receiving station. Mention should be made of the type of set (TRF or superheterodyne), number of valves, make and model, aerial length, height and direction.

The points so far set out are the actual report to the station and the programme items are only given to enable the station to recognize its own transmission. We now come to the report on the actual programme.

The station should be identified with reasonable, certainty by hearing the call or location, or from other information given out. The time such calls were heard and the actual words used should if possible be quoted in the report, and constitute valuable evidence of reception. Should there be any doubt concerning the identity of the station this fact should be mentioned.

The first essential is accurate recording of the local time and a reliable clock should be carefully checked with correct local time at regular intervals and kept absolutely right. The conversion of local time to the time at the transmitting end opens up too big a question to be dealt with here, but wherever possible this should be done and is very necessary in the case of Japan and other foreign countries. In this connection listeners are advised to use the Time Chart supplied with last year's edition of "Radio Calls".

When listing the items the name of the item should be quoted, together with the names of performers, and also whether it is a recording or a studio performance. The type of report giving "lady singing," "man talking" emphatically should be avoided. Of course, we recognize this is most difficult in the case of foreign-speaking stations. A special feature to watch for is the giving of details of announcements and calls, and the advertisers, also what they are advertising.

As we have dealt with the report from the view-point of the stations and not from that of the DXer only wishing to collect cards, we feel sure a report accurately supplying these technical details is much more likely to bring an answer than a report giving only a few items from the programme. Let us endeavour to give something of real value to the stations in return for our verifications.

Finally, in reporting, be accurate in your information. Do not say signals are R6 (above half strength) when they were only just heard, or say signals are QSA5 (100 per cent. readable), without being able to support this by actual wording of calls and names of items. Understate R and QSA figures rather than overstate them, for you will never obtain verifications by flattery.

Summing up, the report should give the following points:— Signal strength (R0-9), Readability (QSA0-5), tone, fading (both depth and period), static, interference, local weather and details of receiving station, the first four preferably with each item reported. These details ought to be supported by sufficient items and announcements from the programme to enable the station definitely to identify its own transmission. The report forms (QSLs) supplied by the N.Z. DX R.A. enable listeners to give a full and valuable report. Already in eighteen months over forty-two thousand forms have been sold to listeners, a definite proof of their value and usefulness.

AFRICA . . .

N.Z. time is equivalent to 8 p.m. in the respective countries

Call Location	Country	k.c.	Watts	N.Z. Time
ZTG—Grahamstown	**South Africa**	**560**	**10000**	**5.30 a.m.**
ZTC—Capetown	**South Africa**	**600**	**10000**	**5.30 a.m.**
CNR—Rabat	**Morocco**	**601**	**6500**	**7.30 a.m.**
Cairo	**Egypt**	**620**	**20000**	**5.30 a.m.**
ZTJ—Johannesburg	**South Africa**	**645**	**10000**	**5.30 a.m.**
ZEC—Salisbury	**South Rhodesia**	**682**	**1500**	**5.30 a.m.**
ZTD—Durban	**South Africa**	**749**	**1000**	**5.30 a.m.**
ZTE—Bloemfontein	**South Africa**	**776**	**500**	**5.30 a.m.**
ZTM—Milnerton	**South Africa**	**800**	**10000**	**5.30 a.m.**
7LO—Nairobi	**Kenya**	**852**	**700**	**5.00 a.m.**
Algiers	**Algeria**	**941**	**12000**	**7.30 a.m.**
ZTP—Pretoria	**South Africa**	**952**	**50**	**5.30 a.m.**
CNO—Casablanca	**Morocco**	**983**	**25**	**7.30 a.m.**
Alexandria	**Egypt**	**1122**	**250**	**5.30 a.m.**
Cairo	**Egypt**	**1348**		**5.30 a.m.**
Alexandria	**Egypt**	**1429**		**5.30 a.m.**
EAJ21—Melilla	**Morocco**	**1492**	**100**	**7.30 a.m.**
EAJ43—Santa Cruz de Teneriffe	**Canary Is.**	**1492**	**100**	**7.30 a.m.**
EAJ46—Ceuta	**Morocco**	**1492**	**100**	**7.30 a.m.**
EAJ50—Las Palmas	**Canary Is.**	**1492**	**250**	**7.30 a.m.**

Mr. Radio Fan, 'Tune In' on these publications—

"Listener-In"—1935 Handbook, 1/6 (All sorts of circuits for the Amateur Constructor)
New "R.C.A. Manual" (for all interested in tubes) 2/-
Braymer's "Armature Winding and Motor Repair," 25/6
Everett's "Communication Engineering," 35/6
Radio Amateur Handbook (Handy's latest), 6/4
"How to become a Radio Operator," (A.R.R.L.) 2/-
"Radio: A Study in First Principles," (Burns) 15/-
"Wireless: The Magic Carpet," (Ralph Stranger). Written like a novel—gives good grounding, 4/-
"The Elements of Wireless," (Stranger). A good follow-on of Magic Carpet, 5/
"Outlines of Wireless," (a follow-on of Stranger's "Elements of Wireless.") 13/
"Rider's Radio Questions and Answers," (Just out) 7/-
"Rider's Practical Radio Repairing Hints," 12/6
"Wireless," (Eccles), 4/-
"Morse Made Easy," 6d.
"Perry's Auto-Time Chart," (morse code: how to acquire), 9d.

SHORT WAVE SECTION

Denton's "S.W. Radio Handbook," 5/-
Wallace's "1933 S.W. Manual," (Wallace won U.S.A. champion cup) 5/-
Ladner and Stoner's Superb production "S.W. Wireless Communication," 32/6
Leutz and Gable's "Short Waves," (Leutz graduated from Marconi Laboratory), 18/6
"Short-Wave Craft," (Gernsback monthly), 21/- p.a. posted
"Below ten metres Ultra S.W. Radio," 3/6

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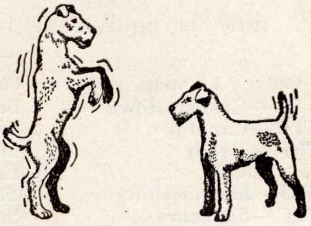
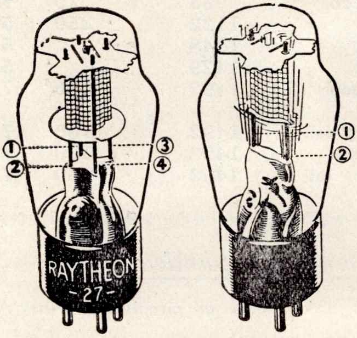


Bowser gives only a short-lived performance on two legs. Nature provided him with four because of a fundamental principle in the scheme of things. Imagine a table or a chair with only two legs! Balance would be impossible! It's the four-square support of the vital elements in Raytheons that guards the balance of their delicately assembled parts and insures their performance life. Four pillars! All other tubes have only two. Inspect them. See for yourself. And then—remember the four support principle. It's your own heel, toe, heel, toe arrangement that keeps you upright. With legs alone you'd be like a man on stilts! You wouldn't remain upright very long!



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(INCORPORATED IN N.S.W.)

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AUCKLAND P.O. Box 1897 CHRISTCHURCH Box 983

NORTH AMERICA . . .

(To convert to Pacific (P) Time subtract 19½ hours—Mountain (M) 18½ hours—Central (C) 17½ hours—Eastern (E) 16½ hours—Atlantic (A) 15½ hours).

† Some days does not close as late as listed.

* Stations reported verified by N.Z. DX R.A. members.

Call	Power	Locality	Amer. Zone	Opening N.Z. Time	Closing N.Z. Time
		540 kilocycles 555.2 metres			
* CJRM	1000	Moose Jaw, Sask.	M	2.30 a.m.	5.30 p.m.
XEAF	250	Nogales, Mex.	M		
		550 kilocycles 545.1 metres			
CFNB	500	Fredericton, N.B.	A	11.40 p.m.	3.30 p.m.
KFUO	500	St. Louis, Mo.	C	12.30 a.m.	4.30 p.m.
* KFYR	1000	Bismarck, N.D.	C	12.30 a.m.	5.30 p.m.
* KOAC	1000	Corvallis, Ore.	P	—	5.30 p.m.
* KSD	1000	St. Louis, Mo.	C	1.30 a.m.	†5.30 p.m.
* KTSA	1000	San Antonio, Texas.	C	12.30 a.m.	5.00 p.m.
TISO	250	San Jose, C.R.	C		
WDEV	500	Waterbury, Vt.	E	Midnight	—
* WGR	1000	Buffalo, N.Y.	E	Midnight	4.30 p.m.
* WKRC	1000	Cincinnati, Ohio	E	11.30 p.m.	5.30 p.m.
WSVA	500	Staunton, Va.	E		
		560 kilocycles 535.4 metres			
KFDM	500	Beaumont, Texas	C	12.45 a.m.	3.30 p.m.
* KLZ	1000	Denver, Colo.	M	1.15 a.m.	6.00 p.m.
* KTAB	1000	San Francisco, Cal.	P	2.30 a.m.	8.30 p.m.
KWTO	1000	Springfield, Mo.	C	11.30 p.m.	—
TGW (565)	10000	Guatemala, Gua.	C	—	4.30 p.m.
* WFIL	1000	Philadelphia, Pa.	E	11.15 p.m.	4.30 p.m.
* WIND	1000	Gary, Ind.	C	12.30 a.m.	6.30 p.m.
* WIS	1000	Columbia, S.C.	E	12.30 a.m.	4.30 p.m.
* WQAM	1000	Miami, Fla.	E	Midnight	4.30 p.m.
XEAO	250	Mexicali, Mex.	P	3.30 a.m.	†6.30 p.m.
		570 kilocycles 526.0 metres			
* KGKO	500	Wichita Falls, Tex.	C	1.00 a.m.	5.00 p.m.
* KMTR	500	Hollywood, Calif.	P	2.15 a.m.	7.00 p.m.
* KVI	1000	Tacoma, Wash.	P	1.30 a.m.	7.30 p.m
* WKBN	500	Youngstown, Ohio	E	Midnight	†4.30 p.m.
* WMCA	500	New York, N.Y.	E	11.30 p.m.	5.30 p.m.
* WNAX	1000	Yankton, S.D.	C	11.30 p.m.	5.30 p.m.
WOSU	750	Columbus, Ohio	E	—	†4.30 p.m.
* WSYR	250	Syracuse, N.Y.	E	Midnight	5.30 p.m.
* WWNC	1000	Asheville, N.C.	E	Midnight	5.00 p.m.
		580 kilocycles 516.9 metres			
* CHRC	100	Quebec, Que.	E	—	5.00 p.m.
CKCL	100	Toronto, Ont.	E	12.30 a.m.	4.00 p.m.

CKUA	500	Edmonton, Alta.	M	—	3.30 p.m.
* KMJ	500	Fresno, Calif.	P	2.30 a.m.	7.30 p.m.
KSAC	500	Manhattan, Kans.	C	Daylight	
WCHS	500	Charleston, W. Va.	E	11.30 p.m.	3.30 p.m.
* WDBO	1000	Orlando, Fla.	E	Midnight	4.30 p.m.
* WIBW	1000	Topeka, Kans.	C	11.30 p.m.	5.30 p.m.
* WTAG	500	Worcester, Mass.	E	12.30 a.m.	4.30 p.m.

590 kilocycles 508.2 metres

* KHQ	1000	Spokane, Wash.	P	2.15 a.m.	7.30 p.m.
* WEEI	1000	Boston, Mass.	E	11.15 p.m.	4.30 p.m.
* WKZO	1000	Kalamazoo, Mich.	E	Midnight	—
* WOW	1000	Omaha, Nebr.	C	Midnight	6.00 p.m.
* XEPN	50000	Piedras Negras	C	10.30 p.m.	5.30 p.m.

600 kilocycles 499.7 metres

* CFCF	400	Montreal, Que.	E	12.30 a.m.	4.30 p.m.
* CJOR	500	Vancouver, B.C.	P	3.00 a.m.	6.45 p.m.
CRCW	1000	Windsor, Ont.	E		
FQN (609)	250	St. Pierre, Miquelon			
* KFSD	1000	San Diego, Calif.	P	2.30 a.m.	7.30 p.m.
WCAC	500	Storrs, Conn.	E	Daylight	
* WCAO	500	Baltimore, Md.	E	11.30 p.m.	4.30 p.m.
* WICC	500	Bridgeport, Conn.	E	12.15 a.m.	5.30 p.m.
* WMT	1000	Waterloo, Ia.	C	12.30 a.m.	5.30 p.m.
* WREC	1000	Memphis, Tenn.	C	12.30 a.m.	5.30 p.m.

610 kilocycles 491.5 metres

CMCF	250	Havana, Cuba	E	Daylight	
* KFRC	1000	San Francisco, Cal.	P	2.30 a.m.	7.30 p.m.
* WDAF	1000	Kansas City, Mo.	C	Midnight	5.30 p.m.
* WIP	1000	Philadelphia, Pa.	E	11.30 p.m.	5.30 p.m.
* WJAY	500	Cleveland, Ohio	E	10.30 p.m.	—
XFX	500	Mexico City, Mex.	M	1.30 a.m.	4.00 p.m.

620 kilocycles 483.6 metres

* KGW	1000	Portland, Ore.	P	2.30 a.m.	7.30 p.m.
* KTAR	1000	Phoenix, Ariz.	M	1.30 a.m.	5.45 p.m.
* WFLA	1000	Clearwater, Fla.	E	Midnight	4.30 p.m.
WHJB	250	Greensburg, Pa.	E	11.30 p.m.	—
* WLBZ	500	Bangor, Maine.	E	12.30 a.m.	4.30 p.m.
* WSUN	1000	St. Petersburg, Fla.	E	Midnight	4.30 p.m.
* WTMJ	1000	Milwaukee, Wis.	C	12.15 a.m.	6.00 p.m.

630 kilocycles 475.9 metres

CFCY	1000	Charlottet'n., P.E.I.	A	Daylight	
CJGX	500	Yorkton, Sask.	C	Daylight	
CKOV	100	Kelowna, B.C.	P	3.30 a.m.	6.00 p.m.
CMBY (635)	250	Havana, Cuba.	E		
* KFRU	500	Columbia, Mo.	C	11.30 p.m.	†5.30 p.m.
KGFX	200	Pierre, S.D.	C	Daylight	
* WGBF	500	Evansville, Ind.	C	12.30 a.m.	†4.30 p.m.
* WMAL	250	Washington, D.C.	E	11.15 p.m.	5.30 p.m.
* WOS	500	Jefferson City, Mo.	C	Daylight	
WPRO	250	Providence, R.I.	E	12.30 a.m.	5.45 p.m.
XEZ	500	Merida, Mex.	C		

640 kilocycles 468.5 metres

* KFI	50000	Los Angeles, Calif.	P	2.00 a.m.	7.30 p.m.
* WAIU	500	Columbus, Ohio.	E	10.45 p.m.	—
* WOI	5000	Ames, Iowa	C	12.15 a.m.	—
XEOX	250	Saltillo, Mex.	M		

650 kilocycles 461.3 metres

* WSM	50000	Nashville, Tenn.	C	Midnight	5.30 p.m.

660 kilocycles 454.3 metres

* WAAW	500	Omaha, Nebr.	C	11.30 p.m.	—
* WEAF	50000	New York, N.Y.	E	11.15 p.m.	5.30 p.m.

670 kilocycles 447.5 metres

* WMAQ	50000	Chicago, Ill.	C	12.30 a.m.	6.30 p.m.

680 kilocycles 440.9 metres

CMAF	1000	Havana, Cuba.	E	—	3.30 p.m.
CMCQ	1000	Havana, Cuba	E		
* KFEQ	2500	St. Joseph, Mo.	C	11.30 p.m.	—
* KPO	50000	San Francisco, Cal.	P	3.00 a.m.	7.30 p.m.
RDN	500	San Salvador, E.S.	C		
* VAS (685)	2000	Glace Bay, N.S.	A	—	3.40 p.m.
VOWR (681)	500	St. John's, Nfld.		Daylight	
* WPTF	5000	Raleigh, N.C.	E	Midnight	—

690 kilocycles 434.5 metres

* CFRB	10000	Toronto, Ont.	E	12.30 a.m.	5.00 p.m.
* CJCJ	100	Calgary, Alta.	M	1.30 a.m.	—
* NAA	1000	Arlington, Va.	E	Daylight	
XET	500	Monterrey, Mexico	M	—	3.30 p.m.

700 kilocycles 428.3 metres

* WLW	500000	Cincinnati, Ohio.	E	11.00 p.m.	†7.30 p.m.

710 kilocycles 422.3 metres

* KMPC	500	Beverly Hills, Cal.,	P	2.15 a.m.	†8.30 p.m.
* KPCB	250	Seattle, Wash.	P	1.00 a.m.	11.30 p.m.
TIFB (714)	30	San Jose, C.R.	C	11.30 p.m.	—
* WOR	50000	Newark, N.J.	E	11.15 p.m.	5.00 p.m.
XEN (711)	1000	Mexico City, Mex.	M	—	5.30 p.m.

720 kilocycles 416.4 metres

CMK (725)	3150	Havana, Cuba	E	—	4.30 p.m.
* WGN	50000	Chicago, Ill.	C	12.30 a.m.	7.00 p.m.

730 kilocycles 410.7 metres

CFPL	100	London, Ont.	E	—	4.00 p.m.
* CJCA	1000	Edmonton, Alberta	M	2.00 a.m.	†7.30 p.m.
* CKAC	5000	Montreal, Que.	E	Midnight	5.30 p.m.
* XEBC	5000	Agua Caliente, Mex.	P	—	7.30 p.m.

740 kilocycles 405.2 metres

* KMMJ	1000	Clay Center, Neb.	C	10.30 p.m.	—
* KTRB	250	Modesto, Calif.	P		
WHEB	250	Portsmouth, N.H.	E	12.30 a.m.	—
* WSB	50000	Atlanta, Ga.	C	12.25 a.m.	6.30 p.m.
XELC	100	Mexico City, Mex.	M		

750 kilocycles 399.8 metres

CMCW (755)	150	Havana, Cuba.	E	—	7.30 p.m.
* KGU	2500	Honolulu, Hawaii		4.30 a.m.	8.30 p.m.
* WJR	10000	Detroit, Mich.	E	10.30 p.m.	4.30 p.m.

760 kilocycles 394.5 metres

* KXA	250	Seattle, Wash.	P	2.30 a.m.	†7.30 p.m.
* WBAL	10000	Baltimore, Md.	E	—	4.30 p.m.

* WEW	1000	St. Louis, Mo.	C	1.30 a.m.	—
* WJZ	50000	New York, N.Y.	E	12.30 a.m.	5.30 p.m.

770 kilocycles 389.4 metres

CMBS (775)	150	Havana, Cuba	E	Daylight	
* KFAB	5000	Lincoln, Nebr.	C	11.30 p.m.	5.30 p.m.
* WBBM	25000	Chicago, Ill.	C	12.20 a.m.	7.45 p.m.

780 kilocycles 384.4 metres

* CHWK	100	Chilliwack, B.C.	P	—	6.00 p.m.
CKSO	1000	Sudbury, Ont.	E		
* KELW	500	Burbank, Calif.	P	11.30 p.m.	3.30 p.m.
* KFDY	1000	Brookings, S.D.	C	Daylight	
* KFQD	250	Anchorage, Alaska.		—	10.30 p.m.
* KGHL	1000	Billings, Mont.	M	2.30 a.m.	5.30 p.m.
* KTM	500	Los Angeles, Calif.	P	1.30 a.m.	11.30 p.m.
* WEAN	500	Providence, R.I.	E	Midnight	5.30 p.m.
* WMC	1000	Memphis, Tenn.	C	12.30 a.m.	5.30 p.m.
* WTAR	500	Norfolk, Va.	E	11.30 p.m.	4.30 p.m.
XEYZ	10000	Mexico City, Mex.	M	—	4.30 p.m.

790 kilocycles 379.5 metres

CMJK	150	Camaguey, Cuba	E	—	3.30 p.m.
* KGO	7500	San Francisco, Cal.	P	2.30 a.m.	7.30 p.m.
* WGY	50000	Schenectady, N.Y.	E	11.15 p.m.	5.30 p.m.

800 kilocycles 374.8 metres

TIGP	75	San Jose, C.R.	C		
* WBAP	50000	Fort Worth, Texas	C	—	†5.30 p.m.
* WFAA	50000	Dallas, Texas	C	12.15 a.m.	†5.00 p.m.
WTBO	250	Cumberland, Md.	E	10.30 p.m.	—

810 kilocycles 370.2 metres

* WCCO	50000	Minneapolis, Minn.	C	12.30 a.m.	5.30 p.m.
WNYC	1000	New York, N.Y.	E	Daylight	
XFC	350	Aguascalientes, M.	P		

820 kilocycles 365.6 metres

* WHAS	50000	Louisville, Ky.	C	12.30 a.m.	5.30 p.m.
XETW	500	Mexico City, Mex.	M	—	5.30 p.m.

830 kilocycles 361.2 metres

* CMC (835)	500	Havana, Cuba	E	—	3.30 p.m.
* KOA	50000	Denver, Colo.	M	1.30 a.m.	6.30 p.m.
TIVL (835)	30	San Jose, C.R.	C	Daylight	
WEEU	1000	Reading, Pa.	E	12.30 a.m.	—
* WHDH	1000	Boston, Mass.	E	11.30 p.m.	—
* WRUF	5000	Gainesville, Fla.	E	12.30 a.m.	—

840 kilocycles 356.9 metres

* CFQC	1000	Saskatoon, Sask.	C	2.30 a.m.	5.30 p.m.
CMQ	5000	Havana, Cuba	E	11.25 p.m.	5.30 p.m.
* CRCT	5000	Toronto, Ont.	E	11.15 p.m.	4.30 p.m.
VOGY	400	St. John's, Nfld.		Daylight	
* XEP	500	Mexico City, Mex.	M		
XEXX (845)	500	Mexico City, Mex.	M	—	4.30 p.m.

850 kilocycles 352.7 metres

* KIEV	250	Glendale, Calif.	P	1.30 a.m.	—
* WWL	10000	New Orleans, La.	C	12.30 a.m.	†5.30 p.m.
WWPA	250	Clarion, Pa.	E		

860 kilocycles 348.6 metres

CMCX (865)	150	Havana, Cuba	E		
* WABC	50000	New York City	E	Midnight	6.00 p.m.
* WHB	1000	Kansas City, Mo.	C	11.30 p.m.	—
* XEMO (865)	2500	Tijuana, B.C., Mex.	P	—	†8.30 p.m.

870 kilocycles 344.6 metres

* CMX (875)	1000	Havana, Cuba	E	—	3.30 p.m.
* WENR	50000	Chicago, Ill.	C	1.30 a.m.	†6.30 p.m.
* WLS	50000	Chicago, Ill.	C	11.30 p.m.	—

880 kilocycles 340.7 metres

CFJC	100	Kamloops, B.C.	P	3.00 a.m.	4.30 p.m.
CRCO	1000	Ottawa, Ont.	E	12.30 a.m.	4.30 p.m.
* KFKA	500	Greeley, Colo.	M	12.30 a.m.	6.30 p.m.
* KLX	1000	Oakland, Calif.	P	3.30 a.m.	6.30 p.m.
* KPOF	500	Denver, Colo.	M	2.00 a.m.	†3.30 p.m.
WCOC	500	Meridian, Miss.	C	1.00 a.m.	4.00 p.m.
WGBI	500	Scranton, Pa.	E	—	†4.30 p.m.
WPHR	500	Petersburg, Va.	E	12.30 a.m.	—
* WQAN	250	Scranton, Pa.	E	—	†3.30 p.m.
* WSUI	500	Iowa City, Iowa.	C	—	3.30 p.m.

890 kilocycles 336.9 metres

CJIC	100	S. Ste. Marie, Ont.	E	Daylight	
* KARK	250	Little Rock, Ark.	C	12.30 a.m.	3.30 p.m.
* KFNF	500	Shenandoah, Iowa.	C	11.00 p.m.	—
* KUSD	500	Vermillion, S.D.	C	—	†3.30 p.m.
* WBAA	1000	W. Lafayette, Ind.	C	Daylight	
* WGST	250	Atlanta, Ga.	C	12.30 a.m.	5.30 p.m.
* WILL	250	Urbana, Ill.	C	1.30 a.m.	—
WJAR	500	Providence, R.I.	E	12.30 a.m.	5.30 p.m.
* WMMN	250	Fairmont, W.Va.	E	Daylight	
* XEW	50000	Mexico City, Mex.	M		

900 kilocycles 333.1 metres

* KGBU	500	Ketchikan, Alaska		—	†11.30 p.m.
* KHJ	1000	Los Angeles, Calif.	P	2.30 a.m.	8.30 p.m.
* KSEI	250	Pocatello, Idaho.	M	2.00 a.m.	5.30 p.m.
* WBEN	1000	Buffalo, N.Y.	E	11.15 p.m.	4.30 p.m.
* WJAX	1000	Jacksonville, Fla.	E	11.30 p.m.	5.30 p.m.
* WKY	1000	Oklahoma City	C	12.15 a.m.	†6.00 p.m.
* WLBL	2500	Stevens Point, Wis.	C	1.30 a.m.	—
WMFI	500	New Haven, Conn.	E		

910 kilocycles 329.6 metres

CJAT	250	Trail, B.C.	P	3.30 a.m.	6.00 p.m.
CMHW	100	Cienfuegos, Cuba	E	Daylight	
CRCM	5000	Montreal, Que.	E		
TICR (911)	75	San Jose, C.R.	C	—	3.30 p.m.
* XENT	60000	Nuevo Laredo, Mex.	M	—	6.30 p.m.

920 kilocycles 325.9 metres

HHK	1000	Port au Prince, Haiti	E		
* KFEL	500	Denver, Colo.	M	12.30 a.m.	†6.30 p.m.
* KOMO	1000	Seattle, Wash.	P	2.30 a.m.	7.30 p.m.
* KPRC	1000	Houston, Texas.	C	Midnight	5.30 p.m.
* KVOD	500	Denver, Colo.	M	—	†7.30 p.m.
* WAAF	500	Chicago, Ill.	C	11.30 p.m.	—
WBSO	500	Babson Park, Mass.	E	Daylight	

WPEN	250	Philadelphia, Pa.	E	Midnight	—
WRAX	250	Philadelphia, Pa.	E	Midnight	—
WSPA	1000	Spartanburg, S.C.	E	10.00 p.m.	—
* WWJ	1000	Detroit, Mich.	E	11.30 p.m.	4.30 p.m.
XEAA	200	Mexicali, Mex.	P	—	3.30 p.m.
XEFE	250	Nuevo Laredo, Mex.	M		

930 kilocycles 322.4 metres

* CFAC	100	Calgary, Alta.	M	2.00 a.m.	5.00 p.m.
CFCH	100	North Bay, Ont.	E	—	4.00 p.m.
CFLC	100	Prescott, Ont.	E	12.30 a.m.	—
CHNS	1000	Halifax, N.S.	A	—	3.30 p.m.
CKPC	100	Brantford, Ont.	E	11.30 p.m.	4.30 p.m.
CKPR	100	Fort William, Ont.	E	—	†3.30 p.m.
CMJF	200	Camaguey, Cuba	E		
CMW	1400	Havana, Cuba	E		
* KGBZ	1000	York, Neb.	C	10.30 p.m.	†5.30 p.m.
* KMA	1000	Shenandoah, Iowa.	C	11.30 p.m.	†4.30 p.m.
* KROW	500	Oakland, Calif.	P	2.30 a.m.	8.30 p.m.
* WBRC	1000	Birmingham, Ala.	C	12.30 a.m.	4.30 p.m.
* WDBJ	1000	Roanoke, Va.	E	12.30 a.m	4.30 p.m.

940 kilocycles 319.0 metres

CMKM	100	Marzanillo, Cuba	E		
* KOIN	1000	Portland, Ore.	P	2.00 a.m.	7.30 p.m.
VOAS	100	St. John's N'fld.	A	Daylight	
* WAAT	500	Jersey City, N.J.	E	11.00 p.m.	—
* WAVE	1000	Louisville, Ky.	C	12.30 a.m.	5.30 p.m.
* WCSH	1000	Portland, Maine	E	12.30 a.m.	4.30 p.m.
* WDAY	1000	Fargo, N.D.	C	12.30 a.m.	5.30 p.m.
* WHA	2500	Madison, Wis.	C	1.30 a.m.	—
* XEFO	5000	Mexico City, Mex.	M	—	5.30 p.m.

950 kilocycles 315.6 metres

CMCD (955)	500	Havana, Cuba	E	—	4.00 p.m.
CMHD	250	Caibarien, Cuba.	E	Daylight	
CRCS	100	Chicoutimi, Que.	E	—	3.30 p.m.
* KFWB	1000	Hollywood, Calif.	P	2.30 a.m.	†7.30 p.m.
KHSL	250	Chico, Calif.	P		
* KMBC	1000	Kansas City, Mo.	C	11.55 p.m.	5.30 p.m.
VONF	5000	St. John's, Nfld.		Daylight	
* WRC	500	Washington, D.C.	E	11.00 p.m.	5.30 p.m.

960 kilocycles 312.3 metres

* CKY	15000	Winnipeg, Man.	C	—	5.30 p.m.
CMJL	50	Camaguey, Cuba.	E		
XEAM	50	Nuevo Laredo, Mex.	M		
* XEAW	10000	Reynosa, Mex.	C	—	6.30 p.m.

970 kilocycles 309.1 metres

CMGF (972)	100	Matanzas, Cuba	E	Daylight	
* KJR	5000	Seattle, Wash.	P	3.00 a.m.	7.30 p.m.
* WCFL	1500	Chicago, Ill.	C	12.30 a.m.	5.30 p.m.
WIBG	100	Glenside, Pa.	E	10.30 p.m.	—

980 kilocycles 305.9 metres

* KDKA	50000	Pittsburgh, Pa.	E	11.30 p.m.	5.30 p.m.

990 kilocycles 302.8 metres

* WBZ	50000	Boston, Mass.	E	11.30 p.m.	5.30 p.m.
* WBZA	1000	Springfield, Mass.	E	11.30 p.m.	5.30 p.m.
* XEK	100	Mexico City, Mex.	M	—	7.30 p.m.
* XES	250	Tampico, Mex.	C	—	3.30 p.m.

1000 kilocycles 299.8 metres

CMBZ (1005)	100	Havana, Cuba	E	—	†4.30 p.m.
* KFVD	250	Los Angeles, Calif.	P	2.00 a.m.	7.30 p.m.
* WHO	50000	Des Moines, Iowa.	C	12.30 a.m.	5.30 p.m.

1010 kilocycles 296.8 metres

* CHML	50	Hamilton, Ont.	E	12.30 a.m.	†4.00 p.m.
* CHWC	500	Regina, Sask.	M	2.30 a.m.	†6.30 p.m.
* CKCD	100	Vancouver, B.C.	P	3.00 a.m.	7.00 p.m.
* CKCK	500	Regina, Sask.	M	—	5.30 p.m.
CKCO	100	Ottawa, Ont.	E	10.30 p.m.	3.30 p.m.
CKIC	50	Wolfville, N.S.	A	Daylight	
* CKWX	100	Vancouver, B.C.	P	2.30 a.m.	†8.30 p.m.
CMJO	50	Ciego de Avila, Cub.	E	Daylight	
* KGGF	1000	Coffeyville, Kans.	C	12.30 a.m.	†4.00 p.m.
* KQW	1000	San Jose, Calif.	P	2.00 a.m.	5.30 p.m.
TIGA (1014)	30	Cartago, C.R.	C		
WHN	1000	New York City	E	Midnight	5.30 p.m.
* WNAD	1000	Norman, Okla.	C	Daylight	
* WNOX	1000	Knoxville, Tenn.	C	12.15 a.m.	5.30 p.m.
* XEU	250	Veracruz, Mex.	C	12.30 a.m.	4.30 p.m.

1020 kilocycles 293.9 metres

* KYW	10000	Philadelphia, Pa.	E	12.15 a.m.	5.30 p.m.
* XEJ	1250	Juarez, Mex.	C	—	5.00 p.m.

1030 kilocycles 291.1 metres

* CFCN	10000	Calgary, Alberta.	M	2.00 a.m.	†6.00 p.m.
* CKLW	5000	Windsor, Ont.	E	11.15 p.m.	5.30 p.m.
CMBC (1035)	150	Havana, Cuba.	E		
CMHI (1037)	150	Santa Clara, Cuba	E	Daylight	
CMKC (1034)	150	Santiago, Cuba	E		
* XEB	10000	Mexico City, Mex.	M	—	5.30 p.m.

1040 kilocycles 288.3 metres

CMGH	15	Matanzas, Cuba.	E	Daylight	
* KRLD	10000	Dallas, Texas.	C	Midnight	5.30 p.m.
* KWJJ	500	Portland, Ore.	P	1.30 a.m.	10.45 p.m.
WKAR	1000	East Lansing, Mich.	E	Daylight	
* WTIC	50000	Hartford, Conn.	E	11.30 p.m.	4.30 p.m.

1050 kilocycles 285.5 metres

* CFCO	100	Chatham, Ont.	E	Midnight	3.30 p.m.
CMJG	50	Camaguey, Cuba.	E		
CRCK	1000	Quebec, Que.	E		
* KFBI	5000	Abilene, Kans.	C	10.30 p.m.	—
* KNX	50000	Hollywood, Calif.	P	2.30 a.m.	†7.30 p.m.

1060 kilocycles 282.8 metres

CMCB	150	Havana, Cuba	E	—	4.30 p.m.
* KTHS	10000	Hot Springs, Ark.	C	12.30 a.m.	5.30 p.m.
* WBAL	10000	Baltimore, Md.	E	12.30 a.m.	—
* WJAG	1000	Norfolk, Neb.	C	12.30 a.m.	—
XEA	125	Guadalajara, Mex.	M	—	4.30 p.m.

1070 kilocycles 280.2 metres

* KJBS	500	San Francisco, Cal.	P	7.30 p.m.	—
* WCAZ	100	Carthage, Ill.	C	Daylight	
* WDZ	100	Tuscola, Ill.	C	1.00 a.m.	—
* WTAM	50000	Cleveland, Ohio.	E	11.00 p.m.	5.30 p.m.

1080 kilocycles 277.6 metres

* WBT	50000	Charlotte, N.C.	E	Midnight	4.30 p.m.
* WCBD	5000	Waukegan, Ill.	C	1.00 a.m.	5.30 p.m.
* WMBI	5000	Chicago, Ill.	C	12.30 a.m.	†6.30 p.m.
XEMA	50	Tampico, Mex.	C		

1090 kilocycles 275.1 metres

CMGI (1094)	30	Colon, Cuba	E		
* KMOX	50000	St. Louis, Mo.	C	11.00 p.m.	5.30 p.m.
* WESG	1000	Elmira, N.Y.	E	Midnight	—

1100 kilocycles 272.6 metres

CMCY	500	Havana, Cuba	E	Daylight	
CMHA (1103)	50	Sagua la Grand, Cu.	E		
CRCV	1000	Vancouver, B.C.	P	—	6.30 p.m.
* KGDM	250	Stockton, Calif.	P	7.30 p.m.	—
* KWKH	10000	Shreveport, La.	C	Midnight	6.00 p.m.
TIRCA	500	San Jose, C.R.	C	--	4.00 p.m.
* WLWL	5000	New York City.	E	Daylight	
* WPG	5000	Atlantic City, N.J.	E	—	5.30 p.m.
XEFG	250	Mexico City, Mex.	M		

1110 kilocycles 270.1 metres

* KSOO	2500	Sioux Falls, S.D.	C	Midnight	—
* WRVA	5000	Richmond, Va.	E	11.30 p.m.	4.30 p.m.
XELO	10000	Piedras Negras	C		

1120 kilocycles 267.7 metres

CHLP	100	Montreal, Que.	E	—	4.30 p.m.
* CHSJ	100	St. John, N.B.	A		
* CKOC	500	Hamilton, Ont.	E	12.15 a.m.	4.30 p.m.
CKX	100	Brandon, Man.	C	—	4.30 p.m.
CMCG (1125)	150	Havana, Cuba	E	—	†4.30 p.m.
CMHJ (1125)	40	Cienfuegos, Cuba	E	Daylight	
KFIO	100	Spokane, Wash.	P	1.30 a.m.	—
* KFSG	1000	Los Angeles, Calif.	P	2.00 a.m.	†7.30 p.m.
* KRKD	1000	Los Angeles, Calif.	P	3.15 a.m.	†7.30 p.m.
* KRSC	100	Seattle, Wash.	P	2.15 a.m.	—
WDEL	250	Wilmington, Del.	E	Daylight	
* WISN	250	Milwaukee, Wis.	C	12.30 a.m.	†5.30 p.m.
WMFH	500	Boston, Mass.	E		
* WTAW	500	College Statn., Tex.	C	Daylight	

1130 kilocycles 265.3 metres

* KSL	50000	St. Lake City, Utah	M	1.30 a.m.	6.30 p.m.
* WJJD	20000	Chicago, Ill.	C	11.30 p.m.	—
WOV	1000	New York City.	E	12.30 a.m.	—

1140 kilocycles 263.0 metres

* KVOO	25000	Tulsa, Okla.	C	Midnight	†6.30 p.m.
* WAPI	5000	Birmingham, Ala.	C	11.30 p.m.	†5.30 p.m.

1150 kilocycles 260.7 metres

CMBG	225	Havana, Cuba	E		
CMJH	50	Ciego de Avila, Cu.	E	12.30 a.m.	—
* WHAM	50000	Rochester, N.Y.	E	12.30 a.m.	5.30 p.m.
XEH	250	Monterrey, Mex.	M	Daylight	
XEWZ	100	Mexico City, Mex.	M		

1160 kilocycles 258.5 metres

* WOWO	10000	Fort Wayne, Ind.	C	12.30 a.m.	†5.30 p.m.

* WWVA	5000	Wheeling, W.Va.	E	11.00 p.m.	†6.30 p.m.
XED	500	Guadalajara, Mex.	M	1.30 a.m.	4.30 p.m.
XEFL	500	Tijuana, Mex.	P		
* XEU	250	Veracruz, Mex.	C	12.30 a.m.	4.30 p.m.

1170 kilocycles 256.3 metres

CMJE	50	Camaguey, Cuba.	E		
COA (1175)	500	Havana, Cuba	E	—	†6.30 p.m.
* WCAU	50000	Philadelphia, Pa.	E	12.30 a.m.	5.30 p.m.

1180 kilocycles 254.1 metres

* KEX	5000	Portland, Ore.	P	2.00 a.m.	7.30 p.m.
* KOB	10000	Albuquerque, N.M.	M	—	3.30 p.m.
VE9EK (1185)	10	Montmagny, Que.	E		
* WDGY	1000	Minneapolis, Minn.	C	Midnight	—
* WINS	1000	New York City.	E	11.30 p.m.	—
WMAZ	1000	Macon, Ga.	E	11.30 p.m	—
XEFA	500	Mexico City, Mex.	M		

1190 kilocycles 252.0 metres

HIJ (1195)	15	Santo Domingo	E	Daylight	
WATR	100	Waterbury, Conn.	E	Daylight	
* WOAI	50000	San Antonio, Tex.	C	12.25 a.m	†5.30 p.m.
* WSAZ	1000	Huntington, W. Va.	E	11.30 p.m.	—

1200 kilocycles 249.9 metres

CHAB	100	Moose Jaw, Sask.	M	2.00 a.m.	4.30 p.m.
CKTB	100	St. Catharines, Ont.	E	—	4.00 p.m.
CMCJ	400	Havana, Cuba	E		
KADA	100	Ada, Okla.	C		
KBTM	100	Jonesboro, Ark.	C	11.30 p.m.	—
KFJB	100	Marshalltown, Iowa	C	11.30 p.m.	—
* KFXD	100	Nampa, Idaho.	M	1.30 a.m.	3.30 p.m.
KFXJ	100	Grand Junc. Col.	M	—	3.30 p.m.
* KGDE	100	Fergus Falls, Minn.	C	12.30 a.m.	—
* KGEK	100	Sterling, Colo.	M	Daylight	
* KGFJ	100	Los Angeles, Calif.	P	24 hours daily	
KGHI	100	Little Rock, Ark.	C	1.30 a.m.	3.30 p.m.
* KMLB	100	Monroe, La.	C	12.30 a.m.	3.30 p.m.
* KOOS	100	Marshfield, Ore.	P	3.30 a.m.	—
KSUN	100	Lowell, Ariz.	M	Daylight	
KVOS	100	Bellingham, Wash.	P	3.00 a.m.	6.00 p.m.
* KWG	100	Stockton, Calif.	P	2.30 a.m.	7.30 p.m.
WABI	100	Bangor, Maine.	E	Daylight	
* WBBZ	100	Ponca City, Okla.	C	Midnight	—
* WBNO	100	New Orleans, La.	C	—	4.30 p.m.
* WCAT	100	Rapid City, S.D.	C	Daylight	
WCAX	100	Burlington, Vt.	E	Daylight	
WCLO	100	Janesville, Wis.	C	12.30 a.m.	—
* WFAM	100	South Bend, Ind.	C	Midnight	5.30 p.m.
WFBE	100	Cincinnati, Ohio.	E	11.30 p.m.	3.30 p.m.
WHBC	100	Canton, Ohio.	E	11.30 p.m.	—
* WHBY	100	Green Bay, Wis.	C	1.00 a.m.	4.30 p.m.
WIBX	100	Utica, N.Y.	E	12.30 a.m.	4.30 p.m.
* WIL	100	St. Louis, Mo.	C	12.30 a.m.	3.30 p.m.
WJBC	100	Bloomington, Ill	C	Daylight	
* WJBL	100	Decatur, Ill.	C	Midnight	3.30 p.m.
WJBW	100	New Orleans, La.	C	1.30 a.m.	—
WKBO	100	Harrisburg, Pa.	E	12.30 a.m.	4.30 p.m.
WKJC	100	Lancaster, Pa.	E	Daylight	
WLVA	100	Lynchburg, Va.	E	11.30 p.m.	—

WMFM	100	Anderson, S.C.	E		
* WMPC	100	Lapeer, Mich.	E	—	†3.30 p.m.
WNBO	100	Washington, Pa.	E	—	4.30 p.m.
* WRBL	100	Columbus, Ga.	C	12.30 a.m.	4.30 p.m.
* WWAE	100	Hammond, Ind.	C	12.30 a.m.	5.30 p.m.
10-AK	15	Stratford, Ont.	E	Daylight	
10-BP	25	Wingham, Ont.	E	Daylight	

1210 kilocycles 247.8 metres

CHNC	100	New Carlisle, Que.	A	—	3.30 p.m.
CJCU	50	Aklairk, N.W.T.	M		
CKBI	100	Prince Albert, Sas.	M		
CKCH	100	Hull, Que.	E	—	3.30 p.m.
CKMC	50	Cobalt, Ont.	E	Daylight	
CMJI	150	Ciego deAvila, Cuba	E	—	†2.30 p.m.
KASA	100	Elk City, Okla.	C	11.30 p.m.	—
KDLR	100	Devils Lake, N.D.	C	1.30 a.m.	—
* KFJI	100	Klamath Falls, Ore.	P	—	4.30 p.m.
* KFOR	100	Lincoln, Neb.	C	12.30 a.m.	4.00 p.m.
KFPW	100	Fort Smith, Ark.	C	11.30 p.m.	—
* KFVS	100	Cape Giradeau, Mo.	C	—	5.30 p.m.
* KFXM	100	San Bernardino, Cal	P	1.30 a.m.	7.30 p.m.
KGY	100	Olympia, Wash.	P	2.30 a.m.	6.30 p.m.
KIEM	100	Eureka, Calif.	P	3.00 a.m.	5.30 p.m.
KPPC	50	Pasadena, Calif.	P	Daylight	
* KWEA	100	Shreveport, La.	C	12.30 a.m.	3.30 p.m.
KWFV	100	Hilo, Hawaii			
KWTN	100	Watertown, S.D.	C	12.30 a.m.	—
WALR	100	Zanesville, Ohio.	E		
WBAX	100	Wilkes-Barre, Pa.	E	11.30 p.m.	†4.30 p.m.
WBBL	100	Richmond, Va.	E	Daylight	
WBRB	100	Red Bank, N.J.	E	Daylight	
WCBS	100	Springfield, Ill.	C	Daylight	
WCOL	100	Columbus, Ohio,	E	12.30 a.m.	†3.30 p.m.
WCRW	100	Chicago, Ill.	C	Daylight	
* WEBQ	100	Harrisburg, Ill.	C	11.30 p.m.	†5.30 p.m.
WEDC	100	Chicago, Ill.	C	—	†7.30 p.m.
* WFAS	100	White Plains, N.Y.	E	—	†4.30 p.m.
* WGBB	100	Freeport, N.Y.	E	—	†4.30 p.m.
WGCM	100	Gulfport, Miss.	C	Daylight	
WGNY	100	Chester, N.Y.	E	Midnight	†5.30 p.m.
* WHBF	100	Rock Island, Ill.	C	1.00 a.m.	3.30 p.m.
* WHBU	100	Anderson, Ind.	C	12.30 a.m.	†4.30 p.m.
WIBU	100	Poynette, Wis.	C	Daylight	
WJBY	100	Gadsden, Ala.	C	Daylight	
* WJEJ	100	Hagerstown, Md.	E	11.30 p.m.	—
WJIM	100	Lansing, Mich.	E		
* WJW	100	Akron, Ohio.	E	—	†5.30 p.m.
* WKOK	100	Sunbury, Pa.	E	—	†4.30 p.m.
WMBG	100	Richmond, Va.	E	11.30 p.m.	4.30 p.m.
WMFG	100	Hibbing. Minn.	C		
WMFN	100	Clarksdale, Miss.	C		
* WOCL	50	Jamestown, N.Y.	E	Daylight	
WOMT	100	Manitowoc, Wis.	C	12.30 a.m.	—
WPAX	100	Thomasville, Ga.	E	12.30 a.m.	—
* WSBC	100	Chicago, Ill.	E	11.30 p.m.	5.30 p.m.
WSIX	100	Springfield, Tenn.	C	11.30 p.m.	—
* WSOC	100	Charlotte, N.C.	E	11.30 p.m.	4.30 p.m.
* WTAX	100	Springfield, Ill.	C	12.30 a.m.	5.30 p.m.
XEE	50	Durango, Mex.	M		
XEFV	100	Juarez, Mexico	M	—	4.30 p.m.
XETH	100	Puebla, Mex.	M	—	5.30 p.m.

1220 kilocycles 245.8 metres

CMHK (1225)	50	Cruces, Cuba	E	Daylight	
KFKU	1000	Lawrence, Kans.	C	Daylight	
KTW	1000	Seattle, Wash.	P	—	†5.30 p.m.
* KWSC	1000	Pullman, Wash.	P	2.15 a.m.	†5.00 p.m.
WCAD	500	Canton, N.Y.	E	Daylight	
* WCAE	1000	Pittsburgh, Pa.	E	11.15 p.m.	5.30 p.m.
* WDAE	1000	Tampa, Fla.	E	12.30 a.m.	4.30 p.m.
* WREN	1000	Lawrence, Kans.	C	12.30 a.m.	5.30 p.m.
XETF	12	Veracruz, Ver.	C		

1230 kilocycles 243.8 metres

CJOC	100	Lethbridge, Alta.	M	2.30 a.m.	4.30 p.m.
CMCA	150	Havana, Cuba	E	—	†3.30 p.m.
CMOK	25	Havana, Cuba	E		
* KGBX	500	Springfield, Mo.	C	—	3.30 p.m.
* KGGM	250	Albuquerque, N.M.	M	12.30 a.m.	—
* KYA	1000	San Francisco, Cal.	P	2.30 a.m.	7.30 p.m.
* WFBM	1000	Indianapolis, Ind.	C	1.00 a.m.	5.30 p.m.
* WNAC	1000	Boston, Mass.	E	11.00 p.m.	5.30 p.m.
XEFJ	100	Monterrey, Mex.	M	—	3.30 p.m.
YNOP	1000	Managua, Nicaragua	C		

1240 kilocycles 241.8 metres

CJCB	1000	Sydney, N.S.	A		
CMHB (1245)	30	San Spirutes, Cuba	E		
KGCU	250	Mandan, N.D.	M	—	3.30 p.m.
* KLPM	250	Minot, N.D.	C	12.30 a.m.	—
* KTAT	1000	Fort Worth, Texas.	C	12.30 a.m.	5.30 p.m.
* KTFI	1000	Twin Falls, Idaho.	M	12.15 a.m.	†6.45 p.m.
* WKAQ	1000	San Juan, P.R.	E	—	†4.30 p.m.
* WXYZ	1000	Detroit, Mich.	E	11.30 p.m.	4.30 p.m.
XEAI	100	Mexico City, Mex.	M		
XEKL	500	Leon, Mex.	M	—	4.30 p.m.
XELA	50	Saltillo, Mex.	M		

1250 kilocycles 239.9 metres

CMCU (1255)	150	Havana, Cuba	E		
* KFOX	1000	Long Beach, Calif.	P	1.30 a.m.	7.30 p.m.
* WCAL	1000	Northfield, Minn.	C	—	3.30 p.m.
* WDSU	1000	New Orleans, La.	C	12.30 a.m.	5.30 p.m.
WHBI	1000	Newark, N.J.	E	Daylight	
* WLB	1000	Minneapolis, Minn.	C	Daylight	
* WNEW	1000	Newark, N.J.	E	11.30 p.m.	8.30 p.m.
* WTCN	1000	Minneapolis, Minn.	C	11.45 p.m.	5.30 p.m.

1260 kilocycles 238.0 metres

CFRN	100	Edmonton, Alta	M	2.00 a.m.	—
KGVO	1000	Missoula, Mont.	M	2.30 a.m.	4.30 p.m.
* KOIL	1000	Council Bluffs, Ia.	C	11.30 p.m.	6.30 p.m.
KPAC	500	Port Arthur, Tex.	C		
* KRGV	500	Weslaco, Texas	C	12.30 a.m.	—
* KUOA	1000	Fayetteville, Ark.	C	12.30 a.m.	—
* KVOA	500	Tucson, Ariz.	M	12.30 a.m.	3.30 p.m.
WHIO	1000	Dayton, Ohio	E	11.30 p.m.	5.30 p.m.
* WNBX	1000	Springfield, Vt.	E	11.45 p.m.	—
* WTOC	1000	Savannah, Ga.	E	11.30 p.m.	5.30 p.m.

1270 kilocycles 236.1 metres

CMCP	150	Havana, Cuba	E		
* HIX	1000	Santo Domingo	E	Daylight	
KGCA	100	Decorah, Iowa.	C	—	5.30 p.m.
* KOL	1000	Seattle, Wash.	P	2.15 a.m.	7.30 p.m.

* KVOR	1000	Colorado Spr. Col.	M	11.30 p.m.	5.30 p.m.
KWLC	100	Decorah, Iowa.	C	1.00 a.m.	—
* WASH	500	Grand Rapids, Mic.	E	11.30 p.m.	4.30 p.m.
* WFBR	500	Baltimore, Md.	E	11.30 p.m.	†5.30 p.m.
* WJDX	1000	Jackson, Miss.	C	12.30 a.m.	4.30 p.m.
WOOD	500	Grand Rapids, Mic.	E	11.30 p.m.	4.30 p.m.
XEG	500	Ensenada, Mex.	P		
XFB	1000	Jalapa, Mex.	C	1.30 a.m.	5.00 p.m.

1280 kilocycles 234.2 metres

CMCO	150	Havana, Cuba	E		
* KFBB	1000	Great Falls, Mont.	M	2.30 a.m.	4.30 p.m.
WCAM	500	Camden, N.J.	E	—	†4.30 p.m.
WCAP	500	Asbury Park, N.J.	E	10.30 p.m.	4.30 p.m.
* WDOD	1000	Chattanooga, Tenn.	C	12.30 a.m.	5.00 p.m.
* WIBA	1000	Madison, Wis.	C	1.00 a.m.	5.30 p.m.
* WORC	500	Worcester, Mass.	E	12.30 a.m.	4.30 p.m.
* WRR	500	Dallas, Texas.	C	12.30 a.m.	4.30 p.m.
WTNJ	500	Trenton, N.J.	E	—	†4.30 p.m.
XEMX	12	Mexico City, Mex.	M		

1290 kilocycles 232.4 metres

* KDYL	1000	Salt Lake City, Ut.	M	1.00 a.m.	7.30 p.m.
KLCN	100	Blytheville, Ark.	C	Daylight	
* WEBC	1000	Superior, Wis.	C	12.30 a.m.	5.30 p.m.
* WJAS	1000	Pittsburgh, Pa.	E	Midnight	†5.00 p.m.
WNBZ	100	Saranac Lake, N.Y.	E		
WNEL	500	San Juan, P.R.	A		

1300 kilocycles 230.6 metres

* CMKJ	20	Guantanamo, Cuba.	E		
HIZ	10	Santo Domingo	E		
* KALE	500	Portland, Ore.	P	2.30 a.m.	†6.30 p.m.
* KFAC	1000	Los Angeles, Calif.	P	24 hours	
* KFH	1000	Wichita, Kans.	C	12.30 a.m.	5.30 p.m.
KFJR	500	Portland, Ore.	P	Daylight	
VOAC	40	St. John's, Nfld.			
WBBR	1000	Brooklyn, N.Y.	E	11.00 p.m.	—
WEVD	1000	New York City	E	11.30 p.m.	5.30 p.m.
WFAB	1000	New York City	E	Daylight	
WFBC	1000	Greenville, S.C.	E	Midnight	—
* WHAZ	500	Troy, N.Y.	E	Silent	
* WIOD	1000	Miami, Fla.	E	12.30 a.m.	4.30 p.m.

1310 kilocycles 228.9 metres

CHCK	50	Charlottet'n, P.E.I.	A	Daylight	
CJKL	100	Kirkland Lake, Ont.	E		
CJLS	100	Yarmouth, N.S.	A		
CKCV	50	Quebec, Que.	E	Daylight	
KCRJ	100	Jerome, Ariz.	M	2.00 a.m.	—
* KFBK	100	Sacramento, Calif.	P	3.30 a.m.	7.30 p.m.
* KFPL	100	Dublin, Texas.	C	11.30 p.m.	—
KFPM	15	Greenville, Texas.	C	1.15 a.m.	—
* KFXR	100	Oklahoma City	C	1.00 a.m.	†4.30 p.m.
* KFYO	100	Lubbock, Texas.	C	12.30 a.m.	—
* KGCX	100	Wolf Point, Mont.	M	2.00 a.m.	—
* KGEZ	100	Kalispell, Mont.	M	2.30 a.m.	3.30 p.m.
KGFW	100	Kearney, Neb.	C	12.30 a.m.	—
* KIT	100	Yakima, Wash.	P	2.30 a.m.	†6.30 p.m.
KIUJ	100	Santa Fe, N. Mex.	M		
KMED	100	Medford, Ore.	P	3.30 a.m.	3.30 p.m.
* KRMD	100	Shreveport, La.	C	12.30 a.m.	—

* KTSM	100	El Paso, Texas	M	1.00 a.m.	4.30 p.m.
* KXRO	100	Aberdeen, Wash.	P	3.00 a.m.	†5.45 p.m.
WAML	100	Laurel, Miss.	C	12.30 a.m.	—
* WBEO	100	Marquette, Mich.	C	Daylight	
* WBOW	100	Terre Haute, Ind.	C	12.30 a.m.	†5.30 p.m.
WBRE	100	Wilkes-Barre, Pa.	E	12.30 a.m.	—
* WCLS	100	Joliet, Ill.	C	Daylight	
* WDAH	100	El Paso, Texas	M	Daylight	
* WEBR	100	Buffalo, N.Y.	E	11.30 p.m.	4.30 p.m.
* WEXL	50	Royal Oak, Mich.	E	12.30 a.m.	8.30 p.m.
* WFBG	100	Altoona, Pa.	E	—	†4.30 p.m.
WFDF	100	Flint, Mich.	E	11.30 p.m.	4.30 p.m.
* WGH	100	Newport News, Va.	E	11.30 p.m.	†4.30 p.m.
* WHAT	100	Philadelphia, Pa.	E	—	4.30 p.m.
* WJAC	100	Johnstown, Pa.	E	Daylight	
* WLBC	50	Muncie, Ind.	C	12.30 a.m.	3.30 p.m.
WLNH	100	Laconia, N.H.	E	12.30 a.m.	—
WMBO	100	Auburn, N.Y.	E	Daylight	
WMFF	100	Plattsburg, N.Y.	E	Daylight	
WNBH	100	New Bedford, Mass.	E	12.15 a.m.	3.50 p.m.
WOL	100	Washington, D.C.	E	11.30 p.m.	4.30 p.m.
* WRAW	100	Reading, Pa.	E	11.30 p.m.	—
* WROL	100	Knoxville, Tenn.	C	12.30 a.m.	5.30 p.m.
WSAJ	100	Grove City, Pa.	E	Daylight	
WSGN	100	Birmingham, Ala.	C	11.30 p.m.	3.30 p.m.
WSJS	100	Winston-Salem, N.C.	E	12.15 a.m.	4.30 p.m.
* WTEL	100	Philadelphia, Pa.	E	11.30 p.m.	—
WTJS	100	Jackson, Tenn.	C	12.30 a.m.	3.30 p.m.
* WTRC	50	Elkhart, Ind.	C	1.30 a.m.	—
XEAJ	15	Cazaca, Mex.	C		
XEC	50	Tijuana, Mex.	P		
XECW	10	Mexico City, Mex.	M		
XEFC	100	Merida, Mex.	C	Daylight	
XEFW	250	Tampica, Mex.	C	Daylight	
XELM	15	Mineral Del Monte	C		
* XETB	125	Torreon, Mex.	M		
XEX	125	Monterrey, Mex.	M	1.30 a.m.	†5.30 p.m.

1320 kilocycles 227.1 metres

CMCK	100	Havana, Cuba	E		
CMOX (1325)	200	Havana, Cuba	E		
* KGHF	500	Pueblo, Colo.	M	1.30 a.m.	4.30 p.m.
* KGMB	250	Honolulu, Hawaii.		4.00 a.m.	†9.00 p.m.
* KID	250	Idaho Falls, Idaho.	M	12.30 a.m.	5.30 p.m.
* KSO	500	Des Moines, Iowa	C	11.00 p.m.	6.30 p.m.
* WADC	1000	Akron, Ohio.	E	12.30 a.m.	4.30 p.m.
* WSMB	500	New Orleans, La.	C	12.30 a.m.	5.30 p.m.

1330 kilocycles 225.4 metres

* KGB	1000	San Diego, Calif.	P	2.30 a.m.	8.30 p.m.
* KMO	250	Tacoma, Wash.	P	2.15 a.m.	6.30 p.m.
* KSCJ	1000	Sioux City, Iowa.	C	1.00 a.m.	4.30 p.m.
* KTRH	500	Houston, Texas	C	Midnight	5.30 p.m.
* WDRC	1000	Hartford, Conn.	E	12.30 a.m.	4.30 p.m.
WORK	1000	York, Pa.	E		
* WSAI	1000	Cincinnati, Ohio.	E	11.30 p.m.	4.30 p.m.
* WTAQ	1000	Eau Claire, Wis.	C	12.30 a.m.	—

1340 kilocycles 223.7 metres

* KFPY	1000	Spokane, Wash.	P	2.30 p.m.	7.30 p.m.
* KGDY	250	Huron, S.D.	C	12.30 a.m.	—
* KGNO	250	Dodge City, Kans.	C	12.30 a.m.	—

* WCOA	500	Pensacola, Fla.	C	—	3.30 p.m.
* WFEA	500	Manchester, N.H.	E	—	3.30 p.m.
* WSPD	1000	Toledo, Ohio.	E	11.30 p.m.	5.30 p.m.
XFD	250	Orizaba, Mex.	C		

1350 kilocycles 222.1 metres

CMBD	150	Havana, Cuba	E	—	3.30 p.m.
* KIDO	1000	Boise, Idaho.	M	3.00 a.m.	6.30 p.m.
* KWK	1000	St. Louis, Mo.	C	Midnight	†6.30 p.m.
* WAWZ	250	Zarephath, N.J.	E	10.30 p.m.	—
* WBNX	250	New York City.	E	10.30 p.m.	—

1360 kilocycles 220.4 metres

CMJP	75	Moron, Cuba.	E	Daylight	
CMKF (1363)	30	Holquin, Cuba	E		
* KGER	1000	Long Beach, Calif.	P	1.30 a.m.	†8.00 p.m.
* KGIR	500	Butte, Mont.	M	2.30 a.m.	5.45 p.m.
WCSC	500	Charleston, S.C.	E	12.30 a.m.	3.30 p.m.
* WFBL	1000	Syracuse, N.Y.	E	11.30 p.m.	5.30 p.m.
* WGES	500	Chicago, Ill.	C	12.30 a.m.	6.30 p.m.
* WQBC	1000	Vicksburg, Miss.	C	1.00 a.m.	†4.30 p.m.
WSBT	500	South Bend, Ind.	C	Midnight	5.30 p.m.

1370 kilocycles 218.7 metres

* CKCW	100	Moncton, N.B.	A	—	3.30 p.m.
CMGE (1375)	30	Cardenas, Cuba.	E	Daylight	
* KCRC	100	Enid, Okla.	C	12.30 a.m.	—
KELD	100	El Dorado, Ark.	C		
* KERN	100	Bakersfield, Calif.	P	2.30 a.m.	7.30 p.m.
KFGQ	100	Boone, Iowa.	C	11.30 p.m.	†5.30 p.m.
* KFJM	100	Grand Forks, N.D.	C	1.30 a.m.	—
* KFJZ	100	Fort Worth, Texas.	C	12.30 a.m.	4.30 p.m
KFRO	100	Longview, Texas	C		
* KGAR	100	Tucson, Ariz.	M	1.30 a.m.	4.30 p.m.
* KGFG	100	Oklahoma City	C	—	†4.30 p.m.
* KGFL	100	Roswell, N. Mex.	M	12.30 a.m.	—
* KGKL	100	San Angelo, Texas.	C	1.30 a.m.	—
* KICA	100	Clovis, N. Mex.	M	—	4.00 p.m.
* KLUF	100	Galveston, Texas	C		
* KMAC	100	San Antonio, Tex.	C	12.30 a.m.	6.00 p.m.
KONO	100	San Antonio, Tex.	C	11.30 p.m.	3.30 p.m.
* KRE	100	Berkeley, Calif.	P	1.30 a.m.	7.30 p.m.
KRKO	50	Everett, Wash.	P	3.00 a.m.	3.30 p.m.
KSLM	100	Salem, Ore.	P		
* KUJ	100	Walla Walla, Wash.	P	2.00 a.m.	5.30 p.m.
* KVL	100	Seattle, Wash.	P	1.30 a.m.	5.30 p.m.
* KWKC	100	Kansas City, Mo.	C	—	5.30 p.m.
* KWYO	100	Sheridan, Wyo.	M	1.30 a.m.	†6.30 p.m.
WABY	100	Albany, N.Y.	E	Midnight	5.30 p.m.
* WAGF	100	Dothan, Ala.	C	1.30 a.m	—
* WBTM	100	Danville, Va.	E	11.30 p.m.	—
* WCBM	100	Baltimore, Md.	E	11.30 p.m.	4.30 p.m.
* WDAS	100	Philadelphia, Pa.	E	—	3.30 p.m.
* WGL	100	Fort Wayne, Ind.	C	12.30 a.m.	5.30 p.m.
* WHBD	100	Mount Orab, Ohio.	E	12.30 a.m.	—
* WHBQ	100	Memphis, Tenn.	C	1.25 a.m.	4.00 p.m.
WHDF	100	Calumet, Mich.	E	11.30 p.m.	—
* WIBM	100	Jackson, Mich.	E	11.30 p.m.	4.30 p.m.
* WJTL	100	Atlanta, Ga.	E	11.15 p.m.	4.30 p.m.
WLLH	100	Lowell, Mass.	E	Daylight	
WMBR	100	Jacksonville, Fla.	E	11.30 p.m.	4.30 p.m.
WMFD	100	Wilmington, N.C.	E		

* WOC	100	Davenport, Iowa	C		
* WPFB	100	Hattiesburg, Miss.	C	1.00 a.m.	—
* WQDM	100	St. Albans, Vt.	E	12.30 a.m.	—
WRAK	100	Williamsport, Pa.	E	Midnight	—
WRDO	100	Augusta, Maine.	E	Midnight	—
* WRJN	100	Racine, Wis.	C	—	4.00 p.m.
WSVS	50	Buffalo, N.Y.	E	Daylight	
XEFZ	100	Mexico City, Mex.	M		
XEI	125	Morelia, Mex.	M	—	3.30 p.m.
XEZZ	100	S. Luis Potosi, Mex.	M	—	3.30 p.m.
	100	Decatur, Ala.	C		

1380 kilocycles 217.3 metres

CMJC (1382)	150	Camaguey, Cuba.	E		
* KOH	500	Reno, Nevada.	P	3.30 a.m.	7.30 p.m.
KQV	500	Pittsburgh, Pa.	E	11.30 p.m.	4.30 p.m.
* WALA	500	Mobile, Ala.	C	1.30 a.m.	4.30 p.m.
* WKBH	1000	LaCrosse, Wis.	C	1.00 a.m.	3.30 p.m.
WMFE	250	New Britain, Conn.	E		
* WSMK	200	Dayton, Ohio.	E	11.50 p.m.	4.30 p.m.

1390 kilocycles 215.7 metres

CJRC	100	Winnipeg, Man.	C	1.30 a.m.	5.00 p.m.
HIH (1395)	15	San Pedro de Macoris, D.R.	E	Daylight	
* KLRA	1000	Little Rock, Ark.	C	Midnight	†5.30 p.m.
* KOY	500	Phoenix, Ariz.	M	1.30 a.m.	4.30 p.m.
* WHK	1000	Cleveland, Ohio.	E	Midnight	4.30 p.m.

1400 kilocycles 214.2 metres

CMCR	150	Havana, Cuba.	E	Daylight	
* KLO	500	Ogden, Utah	M	1.30 a.m.	6.30 p.m.
* KTUL	500	Tulsa, Okla.	C	Midnight	5.30 p.m.
TGX	150	Guatemala City, Gua.			
* WARD	500	Brooklyn, N.Y.	E	—	†4.30 p.m.
* WBBC	500	Brooklyn, N.Y.	E	11.30 p.m.	†5.30 p.m.
* WKBF	500	Indianapolis, Ind.	C	Midnight	5.30 p.m.
* WLTH	500	Brooklyn, N.Y.	E	Daylight	
WVFW	500	Brooklyn, N.Y.	E	11.30 p.m.	†4.30 p.m.

1410 kilocycles 212.6 metres

* CKFC	50	Vancouver, B.C.	P	—	†4.30 p.m.
* CKMO	100	Vancouver, B.C.	P	3.00 a.m.	6.30 p.m.
* KGRS	1000	Amarillo, Texas.	C	11.30 p.m.	†5.30 p.m.
* WAAB	500	Boston, Mass.	E	12.30 a.m.	3.30 p.m.
* WBCM	500	Bay City, Mich.	E	12.30 a.m.	4.30 p.m.
* WDAG	1000	Amarillo, Texas.	C	1.30 a.m.	5.30 p.m.
* WHBL	500	Sheboygan, Wis.	C	11.30 p.m.	—
* WHIS	250	Bluefield, W.Va.	E	11.30 p.m.	—
* WRBX	250	Roanoke, Va.	E	—	3.30 p.m.
* WROK	500	Rockford, Ill.	C	—	4.00 p.m.
* WSFA	500	Montgomery, Ala.	C	Midnight	4.00 p.m.

1420 kilocycles 211.1 metres

CKGB	100	Timmins, Ont.	E	Daylight	
* CKNC	100	Toronto, Ont.	E	12.30 a.m.	3.45 p.m.
* KABC	100	San Antonio, Tex.	C	12.30 a.m.	4.00 p.m.
KABN	100	Aberdeen, S. Dak.	C		
* KBPS	100	Portland, Ore.	P	Silent	
* KCMC	100	Texarkana, Ark.	C	12.30 a.m.	—
* KFIZ	100	Fond du Lac, Wis.	C	—	3.30 p.m.
* KGFF	100	Shawnee, Okla.	C	1.00 a.m.	—
* KGGC	100	San Francisco, Cal.	P	—	6.30 p.m.
* KGIW	100	Alamosa, Colo.	M	—	5.30 p.m.

* KGIX	100	Las Vegas, Nevada	M	2.30 a.m.	5.30 p.m.
* KIDW	100	Lamar, Colo.	M	2.30 a.m.	4.30 p.m.
KORE	100	Eugene, Ore.	P	3.15 a.m.	†6.15 p m.
KRLC	100	Lewiston, Idaho	M		
* KUMA	100	Yuma, Arizona.	M	1.30 a.m.	4.30 p.m.
* KXL	100	Portland, Ore.	P	2.30 a.m.	7.30 p.m.
* WACO	100	Waco, Texas	C	1.30 a.m.	†4.00 p.m.
WAGM	100	Presque Isle, Maine	E	—	†5.00 p.m.
* WAZL	100	Hazelton, Pa.	E	Daylight	
WEED	100	Rocky Mount, N.C.	E	11.30 p.m.	—
WEHC	100	Charlottesville, Va.	E	11.30 p.m.	5.30 p.m.
* WEHS	100	Cicero, Ill.	C	Daylight	
* WELL	50	Battle Creek, Mich.	E	Midnight	3.30 p.m.
WGPC	100	Albany, Ga.	C	12.30 a.m.	—
* WHDL	100	Olean, N.Y.	E	11.30 p.m.	—
* WHFC	100	Cicero, Ill.	C	12.30 a.m.	6.30 p.m.
WILM	100	Wilmington, Del.	E	11.30 p.m.	4.30 p.m.
* WJBO	100	Baton Rouge, La.	C		
WJMS	100	Ironwood, Mich.	C	1.00 a.m.	—
WKBI	100	Cicero, Ill.	C	—	†4.30 p.m.
* WLAP	100	Lexington, Ky.	C	12.30 a.m.	†6.30 p.m
* WLBF	100	Kansas City, Kans.	C	12.30 a.m.	†4.30 p.m.
WLEU	100	Erie, Pa.	E		
* WMAS	100	Springfield, Mass.	E	Midnight	4.30 p.m.
* WMBC	100	Detroit, Mich.	E	Midnight	4.30 p.m
* WMBH	100	Joplin, Mo.	C	1.00 a.m.	—
WMFJ	100	Daytona Beach, Fla.	E		
WNRA	100	Muscle Shoals, Ala.	C	12.30 a.m.	3.30 p.m.
* WPAD	100	Paducah, Ky.	C	12.30 a.m.	4.00 p.m.
WPRP	100	Ponce, P.R.	E		

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WWC	1000	Spartanburg, S.C.	E		
XEAZ	100	Guanjuato, Mex.	C		
XEFB	100	Monterrey, Mex.	M	—	†4.30 p.m.

1430 kilocycles 209.7 metres

CMBX (1435)	150	Havana, Cuba	E		
* KECA	1000	Los Angeles, Calif.	P	2.30 a.m.	6.30 p.m.
* KGNF	500	North Platte, Neb.	C	12.30 a.m.	—
KRNT	250	Cedar Rapids, Iowa	C	12.30 a.m.	5.30 p.m.
* WBNS	500	Columbus, Ohio	E	10.45 p.m.	4.30 p.m.
* WHEC	500	Rochester, N.Y.	E	12.30 a.m.	4.30 p.m.
* WHP	500	Harrisburg, Pa.	E	—	5.30 p.m.
* WNBR	500	Memphis, Tenn.	C	12.30 a.m.	3.30 p.m.
* WOKO	500	Albany, N.Y.	E	12.30 a.m.	5.30 p.m.

1440 kilocycles 208.2 metres

* KDFN	500	Casper, Wyo.	M	2.00 a.m.	3.30 p.m.
* KLS	250	Oakland, Calif.	P	1.30 a.m.	—
* KXYZ	500	Houston, Texas.	C	Midnight	4.30 p.m.
* WBIG	500	Greensboro, N.C.	E	Midnight	3.30 p.m.
WCBA	500	Allentown, Pa.	E	11.30 p.m.	†5.30 p.m.
* WMBD	500	Peoria, Ill.	C	11.30 p.m.	5.30 p.m.
WSAN	500	Allentown, Pa.	E	—	†3.30 p.m.
WTAD	500	Quincy, Ill.	C	Daylight	
XEFI	250	Chihuahua, Mex.	M	3.30 a.m.	†9.30 p.m.

1450 kilocycles 206.8 metres

* CFCT	75	Victoria, B.C.	P	3.30 a.m.	†9.30 p.m.
CHGS	50	Summerside, P.E.I.	A	11.00 p.m.	—

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* KTBS	1000	Shreveport, La.	C	12.30 a.m.	5.30 p.m.
* WGAR	500	Cleveland, Ohio.	E	11.00 p.m.	5.30 p.m.
* WHOM	250	Jersey City, N.J.	E	12.30 a.m.	4.30 p.m.
WSAR	250	Fall River, Mass.	E	12.30 a.m.	—
* WTFI	500	Athens, Ga.	E	Daylight	

1460 kilocycles 205.4 metres

* KSTP	10000	St Paul, Minn.	C	12.30 a.m.	6.00 p.m.
* WJSV	10000	Washington, D.C.	E	11.00 p.m.	5.30 p.m.

1470 kilocycles 204.0 metres

* KGA	5000	Spokane, Wash.	P	1.30 a.m.	7.30 p.m.
* WLAC	5000	Nashville, Tenn.	C	Midnight	5.30 p.m.

1480 kilocycles 202.6 metres

* KOMA	5000	Oklahoma City	C	12.30 a.m.	5.30 p.m.
* WKBW	5000	Buffalo, N.Y.	E	—	5.30 p.m.

1490 kilocycles 201.2 metres

* WCKY	5000	Covington, Ky.	E	11.30 p.m.	†6.30 p.m.

1500 kilocycles 199.9 metres

CMCN	250	Havana, Cuba	E		
* KDB	100	Santa Barbara, Cal.	P	3.00 a.m.	7.30 p.m.
* KGFI	100	Corpus Christi, Tex.	C	12.30 a.m.	3.30 p.m.
* KGFK	100	Moorhead, Minn.	C	1.30 a.m.	—
* KGKB	100	Tyler, Texas.	C	1.30 a.m.	—
* KGKY	100	Scottsbluff, Neb.	M	—	†6.30 p.m.
KNOW	100	Austin, Texas.	C	1.00 a.m.	3.30 p.m.
* KOTN	100	Pine Bluff, Ark.	C	12.30 a.m.	—
* KPJM	100	Prescott, Arizona.	M	2.30 a.m.	—
* KPQ	100	Wenatchee, Wash.	P	2.00 a.m.	6.00 p.m.
* KREG	100	Santa Ana, Calif.	P	—	6.30 p.m.
* KXO	100	El Centro, Calif.	P	2.30 a.m.	4.30 p.m.
* WCNW	100	Brooklyn, N.Y.	E	—	†7.30 p.m.
WDNC	100	Durham, N.C.	E	Midnight	4.30 p.m.
* WGAL	100	Lancaster, Pa.	E	Daylight	
* WHEF	100	Kosciusko, Miss.	C	11.30 p.m.	5.30 p.m.
* WJBK	100	Detroit, Mich.	E	11.30 p.m.	4.30 p.m.
* WKBB	100	E. Dubuque, Ill.	C	12.30 a.m.	—
WKBV	100	Richmond, Ind.	C	—	3.30 p.m.
* WKBZ	100	Muskegon, Mich.	E	Daylight	
WKEU	100	Griffin, Ga.	C	Daylight	
* WMBQ	100	Brooklyn, N.Y.	E	—	†4.30 p.m.
* WMEX	100	Boston, Mass.	E	—	5.30 p.m.
* WNBF	100	Binghamton, N.Y.	E	11.30 p.m.	—
* WOPI	100	Bristol, Tenn.	E	Midnight	†3.30 p.m.
* WRDW	100	Augusta, Ga.	E	12.30 a.m.	—
* WRGA	100	Rome, Ga.	C	12.30 a.m.	—
WSYB	100	Rutland, Vt.	E	Daylight	
* WWRL	100	Woodside, N.Y.	E	12.30 a.m.	†5.00 p.m.
* WWSW	100	Pittsburgh, Pa.	E	12.30 a.m.	4.30 p.m.

1510 kilocycles 198.6 metres

CFRC	100	Kingston, Ont.	E		
CKCR	100	Waterloo, Ont.	E	—	3.30 p.m.

1530 kilocycles 196.1 metres

W1XBS	1000	Waterbury, Conn.	E	—	4.00 p.m.
* W9XBY	1000	Kansas City, Mo.	C	12.30 a.m.	6.30 p.m.

1550 kilocycles 193.5 metres

W2XR	1000	Long Island, N.Y.	E	Daylight	
* W6XAI	1000	Bakersfield, Cal.	P		

SOUTH AMERICA . . .

Call	Town	Country	Kc.	Watts
540—600 kilocycles				
CX2	Montevideo	Urug.	570	
CE58	Santiago	Chile	585	1000
LS10	Buenos Aires	Arg.	590	2870
600—700 kilocycles				
CX4	Montevideo	Urgy.	610	1000
LV3	Cordoba	Arg.	620	1800
CE62	Santiago	Chile	625	1500
LS3	Buenos Aires	Arg.	630	5070
CX6	Montevideo	Urgy.	650	10000
CE66	Santiago	Chile	665	1000
LS4	Buenos Aires	Arg.	670	5090
YV6RV	Valencia	Venez.	675	3000
HJN	Bogota	Colombia	681	1000
CX8	Montevideo	Urgy.	690	1000
700—800 kilocycles				
CE70	Santiago	Chile	705	1000
LS1	Buenos Aires	Arg.	710	5000
CX10	Montevideo	Urgy.	730	1000
LV1	San Juan	Arg.	730	640
CE74	Santiago	Chile	745	1000
LR7	Buenos Aires	Arg.	750	2000
OAX4A	Lima	Peru	750	1500
PRA2	Rio de Janeiro	Bra.	750	1500
PRA8	Recife	Brazil	750	500
CE76	Valparaiso	Chile	760	10000
LT4	Mendoza	Arg.	760	200
CX12	Montevideo	Urgy.	770	1000
LT1	Rosario	Arg.	780	3700
CE78	Santiago	Chile	785	1000
LR10	Buenos Aires	Arg.	790	11050
800—900 kilocycles				
LU2	Bahia Blanca	Arg.	800	500
PRB7	Rio de Janeiro	Bra.	800	500
CE81	Valparaiso	Chile	805	100
CX14	Montevideo	Urgy.	810	5000
LV7	Tucuman	Arg.	820	300
CE82	Santiago	Chile	825	1000
LR5	Buenos Aires	Arg.	830	30000
LT8	Rosario	Arg.	840	460
CX16	Montevideo	Urgy.	850	2500
PRA4	Baia	Brazil	857	50
PRA6	Sao Paulo	Brazil	857	1000
PRB3	Juiz de Fora	Brazil	857	250
LV10	Mendoza	Arg.	860	430
PRA3	Rio de Janeiro	Bra.	860	2500
CE86	Santiago	Chile	865	1000
LR6	Buenos Aires	Arg.	870	39000
CE88	Vina del Mar	Chile	880	1000
LV2	Cordoba	Arg.	880	1593
PRB2	Curitiba	Brazil	882	250

Call	Town	Country	Kc.	Watts
ZP9	Asuncion	Para.	887	
CX18	Montevideo	Urgy.	890	750
900—1000 kilocycles				
LV9	Salta	Arg.	900	500
CE90	Santiago	Chile	905	1000
LR2	Buenos Aires	Arg.	910	9620
CW19	Salto	Urgy.	920	100
PRC3	Pelotas	Brazil	920	250
CE92	Temuco	Chile	923	100
CX20	Montevideo	Urgy.	930	2000
PRB6	Sao Paulo	Bra.	934	250
CE94	Santiago	Chile	945	1000
LR3	Buenos Aires	Arg.	950	13900
YV1RC	Caracas	Ven.	960	5000
PRC6	Rio de Janeiro	Bra.	967	1000
CX22	Montevideo	Urgy.	970	250
CE98	Santiago	Chile	985	1000
LR4	Buenos Aires	Arg.	990	15960
1000—1100 kilocycles				
CW23	Salto	Urgy.	1000	250
HJ4ABC	Pereira	Col.	1000	50
PRB4	Santos	Brazil	1000	1000
PRB8	M. das Cruzes	Br.	1000	50
ZP3	Asuncion	Paraguay	1000	300
HJ3ABH	Bogota	Col.	1005	1000
CE101	Vina del Mar	C.	1010	100
CX24	Montevideo	Urgy.	1010	10000
PRB9	Sao Paulo	Bra.	1017	500
CE100	Santiago	Chile	1025	100
CE102	Santiago	Chile	1025	100
LR9	Buenos Aires	Arg.	1030	3880
CE103	Valdivia	Chile	1035	100
YV11RMO	Maracaibo	V.	1035	
CE104	Magallanes	Ch.	1040	100
CP4	La Paz	Bolivia	1040	10000
CW25	Durazno	Urgy.	1040	500
CE105	Valparaiso	Ch.	1050	100
CX26	Montevideo	Urgy.	1050	2000
LT9	Santa Fe	Arg.	1060	600
CE106	Santiago	Chile	1065	500
CE107	Santiago	Chile	1065	100
LR1	Buenos Aires	Arg.	1070	
HC2JSB	Guayaquil	Ec.	1071	30
CE108	Concepcion	Ch.	1080	100
CW27	Salto	Urgy.	1080	250
LT3	Rosario	Arg.	1080	4200
CE109	Valparaiso	Chile	1090	100
CX28	Montevideo	Urgy.	1090	3000
PRC2	Porto Alegre	Br.	1091	500
PRC7	Belo Horizonte	B.	1091	250
1100—1200 kilocycles				
CE110	Santiago	Chile	1105	100

HJ3ABD—Bogota, Colom.	1110	50
LS5—Buenos Aires, Arg.	1110	5060
PRB5—Franca, Brazil	1111	50
CE111—Osorno, Chile	1115	100
CW29—Mercedes, Urgy.	1120	50
LV5—San Juan, Arg.	1120	340
CE113—Chillan. Chile	1130	100
CX30—Montevideo, Urgy.	1130	500
ZP1—Asuncion, Para.	1135	1000
CE114—Santiago, Chile	1145	100
LR8—Buenos Aires, Arg.	1150	3540
OA4O—Lima, Peru	1150	200
YV7RMO—Maracaibo, V.	1153	
PRA7—Ribeirao Preto, B.	1154	50
PRA9—Rio de Janeiro, B.	1154	1000
CE115—Talca, Chile	1155	100
CW31—Salto, Urgy.	1160	250
LT5—Resistencia, Arg.	1160	500
CE117—Santiago, Chile	1170	250
CX32—Montevideo, Urg.	1170	500
PRC9—Campinas, Braz.	1175	250
CE119—Magallanes, Ch.	1180	100
LS2—Buenos Aires, Arg.	1190	30000

1200—1300 kilocycles

CE118—Santiago, Chile	1200	100
CW33—Florida, Urgy.	1200	75
HJ3ABE—Bogota, Colom.	1200	50
OAX4B—Lima, Peru	1200	250
PRD3—Taubate, Brazil	1200	250
YV3RC—Caracas. Venez.	1200	1000
CE120—Curico, Chile	1205	100
CE121—Vina del Mar, C.	1210	100
CX34—Montevideo, Urgy.	1210	500
PRE3—Rio de Janeiro, B.	1220	5000
CE122—Santiago, Chile	1225	250
LS8—Buenos Aires, Arg.	1230	15460
CW35—Paysandu, Urgy.	1240	30
CE124—Concepcion, Ch.	1245	100
CE125—Valparaiso, Ch.	1250	100
CPX—La Paz, Bolivia	1250	5000
CX36—Montevideo, Urgy.	1250	250
HC2JB—Guayaquil, Ec.	1250	50
CE126—Santiago, Chile	1265	100
LS9—Buenos Aires, Arg.	1270	3500
ZP4—Asuncion, Paraguay	1275	150
CE128—Temuco, Chile	1280	500
CW37—Colonia, Urgy.	1280	20
LU7—Bahia Blanca, Arg.	1280	1400
CX38—Montevideo, Urg.	1290	500
HJ1ABA—Barranquilla C.	1290	
PRA5—Sao Paulo, Bra.	1295	100

1300—1400 kilocycles

PRC8—Rio de Janeiro, B.	1300	250
PRC4—Amparo, Brazil	1304	50
CE130—Santiago, Chile	1305	100
CE131—Santiago, Chile	1305	100
CW39—Paysandu, Urgy.	1320	30
CE132—Rancagua, Chile	1325	100
CX40—Montevideo, Urgy.	1330	500
PRE2—Rio de Janeiro, B.	1330	500
CE133—Osorno, Chile	1335	100
CE134—Santiago, Chile	1345	150
LS6—Buenos Aires, Arg.	1350	4000
PRD2—Rio de Janeiro, B.	1350	1000
CW41—San Jose, Urg.	1360	50
OAX4C—Lima, Peru	1360	5000
PRC5—Belem, Brazil	1364	100
PRD4—Araraquara, Br.	1364	250
CX42—Montevideo, Urgy.	1370	1000
LU6—Mar del Plata, Arg.	1380	50
CE138—Santiago, Chile	1385	100
CE139—Rancagua, Chile	1390	100
LT10—Santa Fe, Arg.	1390	800

1400—1500 kilocycles

CW43—Melo, Uruguay	1400	20
PRD5—Rio de Janeiro, B.	1400	1000
CE141—Concepcion, Ch.	1410	100
CX44—Montevideo, Urgy.	1410	200
CE142—Santiago, Chile	1425	100
CE143—Magallanes, Ch.	1430	100
LS11—La Plata, Arg.	1430	1500
CW45—Durazno, Urgy.	1440	30
CE145—Rancagua, Chile	1450	100
CX46—Montevideo, Urgy.	1450	100
CE146—Santiago, Chile	1465	100
ZP5—Asuncion, Paraguay	1465	150
LU9—Azul, Arg.	1470	50
CW47—Canelones, Urgy.	1480	100
CX48—Montevideo, Urg.	1490	1500

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Call	Kc.	Metres	Watts	Location	N.Z. Closing Time
	540—600 kilocycles			**555.6—499.7 metres**	
XLHB	**560**	**535.7**	**45**	**Shanghai, Kiang-su, China**	**2.30 a.m.**
MTCY	**570**	**526.3**	**100000**	**Hsinking, Manchu-ko**	**2.30 a.m.**
XGOH	**570**	**526.3**	**1000**	**Changsha, Honan, China**	**1.30 a.m.**
XQHA	**580**	**517.2**	**250**	**Shanghai, Kiang-su, China**	
JOAK-2	**590**	**508.5**	**10000**	**Tokyo, Japan**	**12.30 a.m.**
	600—700 kilocycles			**499.7—428.3 metres**	
XMHA	**600**	**500.0**	**600**	**Shanghai, Kiang-su, China**	**4.00 a.m.**
JODK-2	**610**	**491.8**	**10000**	**Seoul, Korea**	**12.30 a.m.**
XGSS	**610**	**491.8**	**15**	**Tsunshi, Che-kiang, China**	
KZRM	**618.5**	**485.1**	**50000**	**Manila, Philippine Islands**	**2.30 a.m.**
JOTK	**625**	**480.0**	**500**	**Matsuye, Japan**	**12.30 a.m.**
JODG	**635**	**472.4**	**500**	**Hamamatsu, Japan**	**12.30 a.m.**
RW28	**635.6**	**472.0**	**300**	**Vladivostok, U.S.S.R. (Siberia)**	
ZEK	**640**	**468.8**	**2000**	**Hong-kong, China**	
	640	**468.8**	**100**	**Shanghai, Kiang-su, China**	**5.15 a.m.**
JOUK	**645**	**465.1**	**300**	**Akita, Japan**	**12.30 a.m.**
JQAK	**652**	**460.1**	**500**	**Dairen, Manchu-ko**	**2.30 a.m.**
JOCG	**655**	**458.0**	**300**	**Asahigawa, Japan**	**12.30 a.m.**
XGOA	**660**	**454.5**	**75000**	**Nanking, Kiang-su, China**	**2.30 a.m.**
RW38	**662.2**	**453.0**	**2000**	**Alexandrovsk, U.S.S.R. (Siberia)**	
JFAK	**670**	**447.8**	**10000**	**Taihoku, Formosa, Japan**	**1.30 a.m.**
MTFY	**674**	**445.1**	**1000**	**Harbin, Manchu-ko**	**2.30 a.m.**
JOLK	**680**	**441.2**	**500**	**Fukuoka, Japan**	**12.30 a.m.**
JOVK	**680**	**441.2**	**500**	**Hakodate, Japan**	**12.30 a.m.**
XGOY	**697.6**	**429.8**	**250**	**Yunnan-fu, Yunnan, China**	**1.30 a.m.**
	700—800 kilocycles			**428.3—374.8 metres**	
JOKK	**700**	**428.6**	**500**	**Okayama, Japan**	**12.30 a.m.**
XMHC	**700**	**428.6**	**500**	**Shanghai, Kiang-su, China**	**3.30 a.m.**
VPB	**705**	**425.5**	**1750**	**Colombo, Ceylon**	**4.00 a.m.**
JOJK	**710**	**422.5**	**3000**	**Kanazawa, Japan**	**12.30 a.m.**
XGOS	**711**	**421.9**	**1000**	**Chunking, Honan, China**	
XGML	**714.3**	**420.2**	**7½**	**Kashing, Kiang-su, China**	**11.45 p.m.**
JFBK	**720**	**416.7**	**1000**	**Tainan, Formosa, Japan**	**1.30 a.m.**
JORK	**720**	**416.7**	**500**	**Kochi, Japan**	**12.30 a.m.**
XLHC	**720**	**416.7**	**50**	**Shanghai, Kiang-su, China**	**4.30 a.m.**
XLHD	**720**	**416.7**	**50**	**Shanghai, Kiang-su, China**	**3.30 a.m.**
XHGS	**730**	**411.0**	**50**	**Wuchow, Kwangsi, China**	**1.30 a.m.**
JOSK	**735**	**408.2**	**1000**	**Kokura, Japan**	**12.30 a.m.**
XHHB	**740**	**405.4**	**50**	**Shanghai, Kiang-su, China**	**5.30 a.m.**
HS7PJ	**750**	**400.0**	**10000**	**Sala Daeng, Bangkok, Siam**	**5.00 a.m.**
JOBK-1	**750**	**400.0**	**10000**	**Osaka, Japan**	**12.30 a.m.**
LUHO	**750**	**400.0**	**20**	**Tung Hsien, Kiang-su, China**	**12.30 a.m.**
XGOK	**750**	**400.0**	**1000**	**Canton, Kwang-tung, China**	**3.30 a.m.**
	750	**400.0**	**20**	**Tientsin, Pe-chi-li, China**	**1.30 a.m.**
XLHI	**760**	**394.7**	**7½**	**Shanghai, Kiang-su, China**	**3.30 a.m.**
XLHJ	**760**	**394.7**	**100**	**Shanghai, Kiang-su, China**	**6.30 a.m.**
JOHK	**770**	**389.6**	**10000**	**Sendai, Japan**	**12.30 a.m.**
VUM	**770**	**389.6**	**200**	**Madras, India**	**1.00 a.m.**
JOPK	**780**	**384.6**	**500**	**Shizuoka, Japan**	**12.30 a.m.**
KZEG	**780**	**384.6**	**1000**	**Manila, Philippine Islands**	**1.00 a.m.**

XHHC	**780**	**384.6**	**100**	**Shanghai, Kiang-su, China**	**1.30 a.m.**
JOGK	**790**	**379.7**	**10000**	**Kumamoto, Japan**	**12.30 a.m.**

800—900 kilocycles 374.8—333.1 metres

XLHK	**800**	**375.0**	**7½**	**Shanghai, Kiang-su, China**	**2.30 a.m.**
XLHL	**800**	**375.0**	**100**	**Shanghai, Kiang-su, China**	**5.00 a.m.**
JOCK-1	**810**	**370.4**	**10000**	**Nagoya, Japan**	**12.30 a.m.**
VUC	**810**	**370.4**	**3000**	**Calcutta, Bengal, India**	**3.36 a.m.**
	810	**370.4**	**100**	**Peiping, Pe-chi-li, China**	**2.30 a.m.**
XQHB	**820**	**365.9**	**30**	**Shanghai, Kiang-su, China**	
JOIK	**830**	**361.4**	**10000**	**Sapporo, Japan**	**12.30 a.m.**
XGWH	**830**	**361.4**	**30**	**Wuhu, Ngan-li-wei, China**	**12.30 a.m.**
XGF	**833.3**	**360.0**	**7½**	**Tsinan, Shantung, China**	**12.30 a.m.**
F3ICD	**840**	**357.1**	**4000**	**Saigon, French Indo-China**	
XGTM	**840**	**357.1**	**15**	**Changsha, Kiang-su, China**	**2.00 a.m.**
XHHA	**840**	**357.1**	**150**	**Shanghai, Kiang-su, China**	**1.30 a.m.**
ZBW	**845**	**355.0**	**2000**	**Hong Kong, China**	**2.10 a.m.**
JOFK	**850**	**352.9**	**10000**	**Hiroshima, Japan**	**12.30 a.m.**
	850	**352.9**	**50**	**Hangchow, Che-kiang, Ch.**	**12.30 a.m.**
VUB	**855**	**350.9**	**3000**	**Bombay, India**	**4.00 a.m.**
HSP1	**856**	**350.5**	**2500**	**Bangkok, Siam**	**2.30 a.m.**
XGOF	**860**	**348.8**	**500**	**Tsinan, Shan-tung, China**	**3.00 a.m.**
XHHD	**860**	**348.8**	**50**	**Shanghai, Kiang-su, China**	**4.30 a.m.**
JOAK-1	**870**	**344.8**	**10000**	**Tokyo, Japan**	**12.30 a.m.**
XLIL	**870**	**344.8**	**25**	**Suchow, Kiang-su, China**	**3.00 a.m.**
XHHV	**880**	**340.9**	**100**	**Shanghai, Kiang-su, China**	**6.30 a.m.**
MTBY	**890**	**337.1**	**2000**	**Mukden, Manchu-ko**	**2.30 a.m.**
XGKA	**895**	**335.2**	**15**	**Kashing, Kiang-su, China**	**1.30 a.m.**

900—1000 kilocycles 333.1—299.8 metres

JODK-1	**900**	**333.3**	**10000**	**Seoul, Korea**	**12.30 a.m.**
JOQK	**920**	**326.1**	**500**	**Niigata, Japan**	**12.30 a.m.**
XHHX	**920**	**326.1**	**1000**	**Shanghai, Kiang-su, China**	**5.30 a.m.**
JOAG	**930**	**322.6**	**500**	**Nagasaki, Japan**	**12.30 a.m.**
VUG	**933**	**321.5**	**1000**	**Delhi, India**	
HSP3	**937**	**320.2**		**Bangkok, Siam**	
	938	**319.8**	**2000**	**Haiphong, Indo-China**	
JONK	**940**	**319.1**	**500**	**Nagano, Japan**	**12.30 a.m.**
XHHE	**940**	**319.1**	**1000**	**Shanghai, Kiang-su, China**	**4.30 a.m.**
XGOP	**950**	**315.8**	**100**	**Peiping, Pe-chi-li, China**	**3.30 a.m.**
JOOK	**960**	**312.5**	**300**	**Kyoto, Japan**	**12.30 a.m.**
XHHF	**960**	**312.5**	**100**	**Shanghai, Kiang-su, China**	**4.30 a.m.**
JOBG	**970**	**309.3**	**500**	**Maebashi, Japan**	**12.30 a.m.**
XLCH	**970**	**309.3**	**75**	**Wusih, Kiang-su, China**	**2.30 a.m.**
JOXK	**980**	**306.1**	**500**	**Tokushima, Japan**	**12.30 a.m.**
XMHB	**980**	**306.1**	**500**	**Shanghai, Kiang-su, China**	**1.30 a.m.**
JOFG	**990**	**303.0**	**300**	**Fukui, Japan**	**12.30 a.m.**
XGCK	**990**	**303.0**	**7½**	**Chuching, Kiang-su, China**	**11.30 p.m.**

1000—1100 kilocycles 299.8—272.6 metres

XGOD	**1000**	**300.0**	**1000**	**Hangchow, Che-kiang, China**	**3.30 a.m.**
XKRI	**1000**	**300.0**	**100**	**Canton, Kwang-tung, China**	**2.00 a.m.**
XOTY	**1000**	**300.0**	**50**	**Taiyuan, Shen-si, China**	**2.00 a.m.**
XGMK	**1005**	**298.5**	**15**	**Poatung, Kiang-su, China**	
XGOW	**1010**	**297.0**	**2000**	**Hankow, Hoo-pe, China**	**1.30 a.m.**
XHHG	**1020**	**294.1**	**100**	**Shanghai, Kiang-su, China**	**6.00 a.m.**
XGOF	**1030**	**291.3**	**1000**	**Foochow, Fukien, China**	**1.45 a.m.**
XHHH	**1040**	**288.5**	**100**	**Shanghai, Kiang-su, China**	**4.45 a.m.**
XHKA	**1050**	**285.7**	**100**	**Tientsin, Pe-chi-li, China**	**3.00 a.m.**
XHHI	**1060**	**283.0**	**100**	**Shanghai, Kiang-su, China**	**3.30 a.m.**
XGOE	**1070**	**280.4**	**1000**	**Nanning, Kwangsi, China**	**1.30 a.m.**
XGOX	**1070**	**280.4**	**200**	**Honan-fu, Honan, China**	**1.00 a.m.**

XHHJ	1080	277.8	200	Shanghai, Kiang-su, China	4.30 a.m.
JOBK-2	1085	276.5	10000	Osaka, Japan	12.30 a.m.
XGOB	1090	275.2	250	Loyang, Honan, China	12.30 a.m.
	1090	275.2		Shuhing, Kwang-tung, China	1.30 a.m.

1100—1200 kilocycles 272.6—249.9 metres

XHHS	1100	272.7	100	Shanghai, Kiang-su, China	3.30 a.m.
XLHM	1120	267.9	50	Shanghai, Kiang-su, China	5.30 a.m.
XLHN	1120	267.9	200	Shanghai, Kiang-su, China	4.30 a.m.
XGOC	1130	265.5	500	Nanchang, Kiang-si, China	1.00 a.m.
XHHL	1140	263.1	100	Shanghai, Kiang-su, China	5.30 a.m.
XGGW	1150	260.8	50	Tengchow, Shan-tung, China	1.00 a.m.
XKYY	1150	260.8	15	Tsangchow, Kiang-su, China	1.00 a.m.
XHHU	1160	258.6	100	Shanghai, Kiang-su, China	3.30 a.m.
XLIF	1170	256.4	30	Wusih, Kiang-su, China	1.00 a.m.
JOCK-2	1175	255.3	10000	Nagoya, Japan	12.30 a.m.
XHHM	1180	254.2	100	Shanghai, Kiang-su, China	2.30 a.m.
XLKA	1194	251.3	30	Peiping, Pe-chi-li, China	12.30 a.m.

1200—1300 kilocycles 249.9—230.6 metres

VUL	1200	250.0	100	Lahore, Punjab, India	
XHHN	1200	250.0	100	Shanghai, Kiang-su, China	5.30 a.m.
	1200	250.0		Bangkok, Siam	
XLPH	1210	247.9	15	Pinghu, Che-kiang, China	1.30 a.m.
XLTC	1210	247.9	15	Wusih, Kiang-su, China	12.30 a.m.
XGOT	1220	246.0	500	Peiping, Pe-chi-li, China	3.00 a.m.
XLKB	1230	243.9	50	Tientsin, Pe-chi-li, China	3.30 a.m.
XHHY	1240	241.9	100	Shanghai, Kiang-su, China	3.30 a.m.
MABS	1250	240.0	35	Siangyang, Hoope, China	1.00 a.m.
XLWU	1250	240.0	50	Wusih, Kiang-su, China	2.30 a.m.
XHHP	1260	238.1	100	Shanghai, Kiang-su, China	4.45 a.m.
XDYF	1270	236.2	15	Wuhu, Ngan-li-wei, China	1.30 a.m.
XHHQ	1280	234.4	80	Shanghai, Kiang-su, China	
	1280	234.3	100	Tientsin, Pe-chi-li, China	1.30 a.m.

1300—1400 kilocycles 230.6—214.2 metres

XQHC	1300	230.8	400	Shanghai, Kiang-su, China	4.45 a.m.
XLIJ	1310	229.0	50	Wusih, Kiang-su, China	Midnight
XLIA	1320	227.3	15	Ningpo, Che-kiang, China	1.30 a.m.
XLIK	1330	225.6	50	Changchow, Fukien, China	Midnight
XGSA	1335	224.7	10	Kiangyin, Kiang-su, China	4.30 a.m.
XHHR	1340	223.9	50	Shanghai, Kiang-su, China	5.30 a.m.
XQHD	1360	220.6	200	Shanghai, Kiang-su, China	6.00 a.m.
XHHA	1370	219.0	50	Hangchow, Che-kiang, Ch.	12.15 a.m.
XLHE	1380	217.4	75	Shanghai, Kiang-su, China	3.30 a.m.
XLHF	1380	217.4	50	Shanghai, Kiang-su, China	4.30 a.m.
	1390	215.8	50	Wusih, Kiang-su, China	2.30 a.m.

1400—1500 kilocycles 214.2—199.9 metres

FFZ	1400	214.3	250	Shanghai, Kiang-su, China	
XLHO	1400	214.3	100	Shanghai, Kiang-su, China	2.30 a.m.
XHHK	1420	211.3	100	Shanghai, Kiang-su, China	
XLHQ	1440	208.3	30	Shanghai, Kiang-su, China	11.30 p.m.
XLIB	1450	206.9	15	Suchow, Kiang-su, China	2.30 a.m.
XQHE	1460	205.5	250	Shanghai, Kiang-su, China	3.30 a.m.
XGDZ	1470	204.1	10	Changchow, Fukien, China	1.00 a.m.
XOMO	1470	204.1	250	Peiping, Pe-chi-li, China	3.30 a.m.
XQHF	1480	202.7	200	Shanghai, Kiang-su, China	5.30 a.m.
XLKS	1490	201.3	20	Kashing, Kiang-su, China	12.30 a.m.
XHHT	1500	200.0	100	Shanghai, Kiang-su, China	3.30 a.m.
XOCL	1500	200.0	7½	Tsinan, Shan-tung, China	3.30 a.m.

AUSTRALIA AND NEW ZEALAND . . .

Times are all N.Z. Standard Time

Call	Location	Kc.	Watts	UP-TO-DATE SCHEDULE
2CO	Corowa	560	7125	Mon. to Fri., 8.30-10, 11 a.m.-1, 1.30-3.45, 4.30-5.45, 7 p.m.-12.30 a.m.; Sat., 8.30-10, 11 a.m.-1, 1.30-6.30, 7 p.m.-12.30 a.m.; Sun., 12.30-1.45, 2.30-6.15, 7.30 p.m.-mid.
2YA	Wellington	570	5000	Mon. to Sat., 7-8.30, 10 a.m.-11 p.m.; Sun., 9 a.m.-12.15 p.m., 1-4.30, 6-10 p.m.
7ZL	Hobart	580	1200	Mon. to Fri., 8.30-10 a.m., 12.15-3.30, 4.30-6.30, 7 p.m.-12.30 a.m.; Sat., 8.30-10 a.m., 1 p.m.-1 a.m.; Sun., noon-1.45, 4.30-6, 7.30-11.30 p.m.
3AR	Melbourne	610	4500	Mon. to Fri., 8.30-11 a.m., 1-7.15, 7.45 p.m.-mid.; Sat., 8.30-11 a.m., 1-7.15, 7.45 p.m.-1.30 a.m.; Sun., 12.30-4.30, 6-11.30 p.m.
4ZP	Invercargill	620	500	Mon. to Thurs., 1-2, 5-10 p.m.; Fri., 1-2, 5-11 p.m.; Sat. 10 p.m.-mid.; Sun., 11 a.m.-noon, 6.30-10 p.m.
5CK	Crystal Brook	635	7500	Mon. to Fri., 9.30-10.30 a.m., 1-4, 5-6.30, 7.45 p.m.-1 a.m.; Sat., 9.30-10.30 a.m., 1.30-7.15, 7.45 p.m.-1.30 a.m.; Sun. 12.30-3, 4-7, 7.45 p.m.-12.30 a.m.
1YA	Auckland	650	10000	Mon. to Sat., 7-8.30, 10 a.m.-11 p.m.; Sun., 9 a.m.-12.15, 1-4.30, 6-10 p.m.
2FC	Sydney	665	5000	Mon. to Fri., 8.30-9.30, 11 a.m.-1, 1.30-3.30, 4.30-5.45, 6.45 p.m.-1 am; Sat., 8.30-9.30, 11 a.m.-1, 1.30-6.30, 7 p.m.-1 a.m.; Sun., 11.30 a.m.-2, 4.30-6, 7.30 p.m.-mid.
6WF	Perth	690	3500	Mon. to Fri., 11 a.m.-noon, 2.30-5.30, 6.30-8, 9 p.m.-2.30 a.m., Sat., 11 a.m.-noon, 2-5.30, 6-8.50, 9 p.m.-3 a.m.; Sun., 2-5, 6.30-8, 9.30 p.m.-2 a.m.
3YA	Christchurch	720	* 2500	Mon. to Sat., 7-8.30, 10 a.m.-11 p.m.; Sun., 9 a.m.-12.15, 1-4.30, 6-10 p.m. * 10,000 watts early in May.
5CL	Adelaide	730	3500	Same schedule as 5CK, 635 kc.

2YB	New Plymouth	750	100	Mon., 7-10 p.m.; Wed., 6.30-10 p.m.; Sat., 1.30-5, 6.30-10 p.m.; Sun., 6-10 p.m.
7NT	Kelso	750	7000	Opening May 1935
4QG	Brisbane	760	5000	Mon. to Fri., 8.30-10 a.m., 12.30-3.30, 4.30-6, 7 p.m.-12.30 a.m.; Sat., 8.30-10 a.m., 12.30-6.30, 7 p.m.-1 a.m.; Sun., noon-1.45, 4-7, 7.30-11.45 p.m.
1ZH	Hamilton	770	40	Mon., 8-10 p.m.; Tues., Thurs., noon-1, 8-10 p.m.; Wed., noon-1 p.m.; Fri., 6-7, 8-10 p.m.
4YA	Dunedin	790	500	Mon. to Sat. 7-8.30, 10 a.m.-11 p.m.; Sun., 9 a.m.-12.15, 1-4.30, 5.30-10 p.m.
3LO	Melbourne	800	3500	Mon. to Fri., 8.30-9.30, 11 a.m.-1, 1.30-3.30, 4.30-5.45, 7 p.m.-1 a.m.; Sat., 8.30-9.30, 11 a.m.-1, 1.30-5.45, 7 p.m.-1 a.m.; Sun., 11.30 a.m.-1.45, 4.30-6.15, 7.30 p.m.-mid.
2ZH	Napier	820	65	Mon., Tues., Fri., noon-2, 7-10.30 p.m.; Wed., noon-2, 6.30-10.30 p.m.; Thurs., noon-2 p.m.; Sat., 10 a.m.-5, 7-11 p.m.; Sun., noon-3, 6.30-10.10 p.m.
3GI	Longford	830	7000	Opening June 1935
2YC	Wellington	840	200	Mon. to Sat., 5-6, 7-10 p.m.; Sun., 6-10 p.m.
2BL	Sydney	855	3000	Mon. to Fri., 8.30-11 a.m., 1-7, 7.35 p.m.-mid.; Sat. 8.30-11 a.m., 1-7, 7.35 p.m.-1.30 a.m.; Sun., 12.25-4.30, 6-11.30 p.m.
1YX	Auckland	880	150	Mon. to Sat., 5-6, 7-10 p.m.; Sun., 6-10 p.m.
6PR	Perth	880	500	Mon. to Sat., 10.30 a.m.-noon, 2-3.30, 9 p.m.-2 a.m.; Sun., 11.30 p.m.-1.30 a.m.
7HO	Hobart	890	100	Mon. to Sat., 9.30-10.30 a.m., 1.30-3.30, 7.30 p.m.-mid.; Sun. 9.30-11 p.m.
2ZP	Wairoa	900	250	Tues., 7-9 a.m., 6.30-10.30 p.m.; Wed. to Sat., 7-9 a.m. Sun., 7.30-9.30 a.m.
3MA	Mildura	900	50	Mon., Tues., Thurs., Fri., 2-3, 8 p.m.-mid.; Wed., 2-3, 7.30 p.m.-mid.; Sat., 2-3, 8 p.m.-12.30 a.m.; Sun. 11.30 a.m.-12.30, 8-11.30 p.m.
4WK	Warwick	900	50	Daily 12.30-3.30, 7-11.30 p.m.
4RK	Rockhampton	910	5000	Same schedule as 4QG, 760 kc.

3UZ	Melbourne	930	650	Mon. to Thurs., 8.30 a.m.-3.30, 4.45 p.m.-1 a.m.; Fri., 8.30 a.m.-4, 4.45 p.m.-1 a.m.; Sat. 8.30 a.m.-1.30, 7.30 p.m.-1.30 a.m.; Sun. 11.30 a.m.-2, 7.15-11.30 p.m.
3ZR	Greymouth	940	400	Mon. to Fri., 7.30-8.30 a.m., 3-5, 6-7, 7.30-10 p.m.; Sat., 7.30-8.30 a.m., 1.30-5, 6-9 p.m.; Sun., noon-1.30, 5.30-6.30, 7-9 p.m.
5RM	Renmark	940	1000	Day sessions indefinite. Daily 8 p.m.-1.15 a.m.
2GB	Sydney	949	1000	Mon. to Sat., 8.30 a.m.-2, 2.30 p.m.-1 a.m.; Sun, 9.30 a.m.-1.30, 2.15 p.m.-mid.
2ZF	Palmerston N.	960	250	Mon., Thurs., Sat., 8-10 p.m.; Wed. 6.15-10 p.m.; Fri., Sun., 7-9.30 p.m.
5DN	Adelaide	960	300	Mon. to Fri., 9.15 a.m.-1.15 a.m.; Sat., 9.15 a.m.-3, 8 p.m.-1.15 a.m.; Sun., 8.45 p.m.-12.20 a.m.
3BO	Bendigo	970	200	Mon. to Fri., 12.30-3, 6.30 p.m.-mid.; Sat., 12.30 p.m.-mid.; Sun., 7.30-11.30 p.m.
2ZJ	Gisborne	980	60	Mon., Fri., Sat., 7-10 p.m.; Tues., Wed., noon-1.30, 7-10 p.m.; Thurs. 7-8 p.m.; Sun., silent.
4AY	Ayr	980	50	Mon. to Sat., 7.30-8.30, 9.15 p.m.-mid.; Sun. 9.30-11.30 p.m.
6BY	Bunbury	980	50	Mon., Wed., Fri. Sat., 2.30-5.30, 10.30 p.m.-2 a.m.; Tues., Thurs.. 2.30-5.30, 10 p.m.-2 a.m.; Sun., 11 p.m.-1.30 a.m.
4GR	Toowoomba	1000	50	Mon. to Sat., 8-11 a.m., 1.30-3.30, 7-11.30 p.m.; Sun., 11.30 a.m.-2.30. 8.30-11.30 p.m.
3HA	Hamilton,Vic.	1010	300	Mon. to Sat., 8.30-10.30 a.m., 1.30-6, 7.15 p.m.-mid.; Sun., 12.30-6, 8-15 p.m.-12.30 a.m.
2UE	Sydney	1025	3000	Mon. to Sat., 7.30 a.m.-3, 4 p.m.-1 a.m.; Sun., 9.30 a.m.-1.30, 3 p.m.-12.30 a.m.
5PI	Crystal Brook	1040	2000	Same as 5AD, 1310 kc.
2CA	Canberra	1050	500	Mon. to Fri., 2-3, 7-8, 9-11.30 p.m. Sat. 7-8, 9-11.30 p.m.; Sun. 9.30-11.30 p.m.
4ZB	Dunedin	1050	30	Wed., Thurs., 6-11 p.m.; Sun., 10 a.m.-noon .
4ZM	Dunedin	1050	30	Mon., Wed., Thurs., Fri., 9-11.45 a.m., 1-2 p.m.; Tues., 9-11.45 a.m., 1-2, 6-11 p.m.; Fri., 10 a.m.-noon, 1-2 p.m.; Sat., 9-noon, 5-10 p.m.; Sun.. 2-10 p.m.

4ZO	Dunedin	1050	20	Mon., noon-1, 2-3, 5-6, 8-11 p.m.; Tues., Wed., Thurs., noon-1, 2-3, 5-6 p.m.; Fri., noon-1, 2-3, 5-6, 7-11 p.m.; Sat., noon-1 p.m.
3YB	Melbourne	1060	25	Mon. to Sat., 8 p.m.-mid.; Sun., 8.30-11.30 p.m.
4MB	Maryborough	1060	50	Mon. to Fri., 10-11.30 a.m., 1.30-3.30, 8-11.30 p.m.
2KY	Sydney	1070	1000	Mon., Tues., Fri., 8.15 a.m.-1.30, 2.30-5, 6 p.m.-12.30 a.m.; Sat., 8.15-10a.m., 2-6, 7 p.m.-12.30 a.m.; Sun., 9 a.m.-4.30, 5.30 p.m.-12.30 a.m.
3SH	Swan Hill	1080	50	Mon. to Sat., 2-3, 8.30 p.m.-mid.; Sun., 1.45-3.45, 5.45-7.30, 8.45-11.30 p.m.
1ZB	Auckland	1090	100	Tues. to Fri., 9-9.30, 10.15-11 a.m., 7-10 p.m.; Sat., 9-9.30, 10.15-11 a.m.; Sun. 9 a.m.-noon, 6.30-9.30 p.m.
6AM	Northam	1090	500	Mon. to Sat., 10 a.m.-noon, 3.30-5.30, 9 p.m.-2 a.m.; Sun., 1.30-5.30. 6.30-8.30, 9.30 p.m.-1.30 a.m.
7LA	Launceston	1100	300	Mon. to Fri., 1.30-3.30, 7 p.m.-mid.; Sat., 3.30-5.30, 7 p.m.-mid; Sun., 7.15-11.30 p.m.
2HD	Newcastle	1110	500	Mon. to Fri., 7.30 a.m.-mid.; Sat., Sun., 7.30 a.m.-1.30 a.m.
2UW	Sydney	1125	1000	24 hours Daily
6ML	Perth	1135	500	Mon. to Fri., 10.30 a.m.-noon, 2.30-4, 9 p.m.-2 a.m.; Sat., 10.30 a.m.-noon, 2.30-4, 9.30 p.m.-2 a.m.; Sun. 10.30 p.m.-1.30 a.m.
4YO	Dunedin	1140	150	Mon. to Sat., 5-6, 7-10 p.m.; Sun., 6-10 p.m.
4BC	Brisbane	1145	1000	Mon. to Fri., 8-10.30, 11.30 a.m.-5.30, 7 p.m.-12.30 a.m.; Sat., 8-10.30 a.m., 2.30 p.m.-12.30 a.m.; Sun. 11.30 a.m.-1.30, 4.30 p.m.-mid.
2ZM	Gisborne	1150	15	Mon. to Wed., Fri., Sat., 9.15-10 a.m.; Thurs., 9.15-10 a.m, 8-10 p.m; Sun. 7-10 p.m.
2WG	Wagga	1155	50	Mon. to Sat., 9.15-10 a.m., 1.30-3.30, 8 p.m.-mid.; Sun., 9.30-11.30 p.m.
4TO	Townsville	1170	200	Mon., Tues., Thurs., Fri., 1.30-3.30, 5-6, 7.30-11.45 p.m; Wed., Sat., 1.30-7, 7.30-11.45 p.m.; Sun., 8.30-11.30 p.m.

2ZD Masterton	1170	9	Daily including Sun., 8-10 p.m. (Relays 2YA Tues., Fri., Sat., Sun.)
3DB Melbourne	1180	600	Mon. to Fri., 8 a.m.-3.15, 3.30 p.m.-1 a.m.; Sat., 8 a.m.-1.30 a.m.; Sun., 11.30 a.m.-2, 4-11.30 p.m.
4MK Mackay	1190	100	Mon. to Fri., 11 a.m.-12.30, 3-7, 8 p.m.-12.30 a.m.; Sat., 11 a.m.-7, 8 p.m.-12.30 a.m.; Sun., 11.30 a.m.-1.30, 7.30-11 p.m.
3YL Christchurch	1200	500	Mon. to Sat., 5-6, 7-10 p.m.; Sun., 6-10 p.m.
5KA Adelaide	1200	300	Mon. to Fri., 8.30 a.m.-4, 7 p.m.-1 a.m.; Sat., 8.30 a.m.-2 a.m.; Sun., noon-2, 5-6, 6.45 p.m.-1 a.m.
2CH Sydney	1210	1000	Daily 8.30-11, 11.30 a.m.-2, 3.30-6, 6.40 p.m.-mid.
2GF Grafton	1220	50	Mon. to Sat., 2.30-3.30, 7 p.m.-mid.; Sun., silent.
6KG Kalgoorlie	1220	85	Mon. to Fri., 2.30-4.30, 10 p.m.-2 a.m.; Sat., 5.30-8.30, 10.30 p.m.-2 a.m.; Sun., 11.15 p.m.-1.30 a.m.
4ZL Dunedin	1220	100	Mon., Thurs., 7-9 a.m., 7.30-11 p.m.; Tues., Wed., Fri., 7-9 a.m.; Sat., 7-9 a.m., 7-11 p.m.; Sun., 8-10 a.m.
2ZL Hastings	1240	50	Thurs., 6.30-11 p.m.; Sun., 9.30 a.m.-noon.
2NC Newcastle	1245	2000	Mon. to Fri., 8.30 a.m.-1, 1.30-3.30, 4.30-6.15, 6.45 p.m.-12.30 a.m.; Sat., 8.30 a.m.-6.30, 7.30 p.m.-12-30 a.m.; Sun, noon-2 p.m., 2.30-6, 7.30 p.m.-mid.
1ZM Manurewa	1260	50	Mon. to Fri., 5-10 p.m.; Sat., 1-4, 5 p.m.-Mid.; Sun., 10 a.m.-6, 7-10 p.m.
3WR Shepparton	1260	50	Indefinite.
2SM Sydney	1270	1000	Daily 8.30-10.30 a.m., 2.30 p.m.-mid.
3TR Sale	1280	250	Mon. to Fri., noon-3, 7.30 p.m.-mid.; Sat., noon-2.30, 7.30 p.m.-mid.; Sun., 8 p.m.-mid.
4ZC Cromwell	1280	7	Mon., Thurs., noon-1, 7-9 p.m.; Tues., Wed., Fri., Sat., noon-1 p.m.; Sun., 11 a.m.-12.30 p.m.
4BK Brisbane	1290	200	Mon. to Fri., 10 a.m.-2.30, 7 p.m.-12.30 a.m.; Sat., 10 a.m.-2.30, 7 p.m.-1.30 a.m.; Sun., 8 p.m.-mid.

3BA	Ballarat	1300	50	Mon. to Fri., 9-11.30 a.m., 8.30 p.m.-mid.; Sat., 9-11.30 a.m., 2.30-6.30, 8.30 p.m.-12.30 a.m.; Sun., 2.15-4.30, 8-11.30 p.m.
1ZJ	Auckland	1310	40	Tues., Thurs., noon-2 p.m.; Wed., 7.30-9.30 p.m.
5AD	Adelaide	1310	300	Daily, 9 a.m.-1 a.m.
2MO	Gunnedah	1320	50	Mon. to Sat., 9.15-10.30 a.m., 2.15-3.15, 8-10.30 p.m.; Sun., 9.30-11.30 a.m., 8-10.30 p.m.
4RO	Rockhampton	1330	50	Mon., Tues., Thurs., Fri., Sat., 7.30-11.30 p.m.; Wed., 7.30-11.45 p.m.: Sun., 8.30-11.30 p.m.
2XN	Lismore	1340	50	Mon. to Fri., 8.30-9.30 a.m.; 3.30-4.30, 7.30-11.30 p.m.; Sat., 8.30-9.30 a.m., 7.30-11.30 p.m.
4ZR	Balclutha	1340	4	Mon., Tues., Wed., Sat., 9.30-10.30 a.m.; Thurs., 9.30-10 a.m., 7-10.30 p.m.; Fri., 9.30-10 a.m., 2-3 p.m.; Sun., 10 a.m.-noon. (Temporarily off the air)
3KZ	Melbourne	1350	600	Mon. to Thurs., 8 a.m.-3.30, 4-6, 6.45 p.m.-1 a.m.; Fri., 8 a.m.-6, 6.45 p.m.-1 a.m.; Sat., 8 a.m.-12.15, 1.45 p.m.-2.30 a.m.; Sun., 4-6, 7.30-11.30 p.m.
2BH	Broken Hill	1360	100	Mon. to Sat., 9-11 a.m., 8 p.m.-12.30 a.m.; Sun., 12.30-3, 8 p.m.-mid.
2ZR	Nelson	1360	50	Mon., Wed., 5-10 p.m.; Tues., Thurs., 6-10 p.m.; Sat., 2.30-4.45, 6-10 p.m.; Sun., 10.45 a.m.-1, 6.15-9.30 p.m.
7BU	Burnie	1360	50	Opening Shortly.
3HS	Horsham	1370	50	Mon. Thurs., 1.30-3, 8 p.m.-mid.; Tues., Wed., Fri., 1.30-3, 7.30 p.m.-mid.; Sat., 1.30-3, 8 p.m.-12.30 a.m.; Sun., 1.30-3, 8.30-11.30 p.m.
4BH	Brisbane	1380	600	Mon. to Fri., 8.30-10.30 a.m., 12.30-2.30, 7 p.m.-12.30 a.m.; Sat., 8.30-10.30 a.m.; 7 p.m.-12.30 a.m.; Sun., 1.30-4.30, 8 p.m.-mid.
2GN	Goulburn	1390	100	Mon. to Fri., 1.45-3.15, 7.30 p.m.-mid.; Sat.. 1.30-2.30, 7.30 p.m.-mid.; Sun., 9-11.30 p.m.
2ZO	Palmerston N.	1400	100	Tues., 6.30-10 p.m.; Thurs., 6.30-9 p.m.; Sun., 10 a.m.-12.30 p.m.
3GL	Geelong	1400	50	Mon., 8.30-10.45 a.m., 2.30-3.30, 7 p.m.-mid.; Tues., Wed., Thurs., 9-10.45 a.m.; 2.30-3.30, 7 p.m.-mid.; Fri., 8.45-10.45 a.m., 2.30-3.30, 7 p.m.-mid.; Sat., 9-10.45 a.m., 7.30 p.m.-12.30 a.m.; Sun., 8.30-11.35 p.m.

2KO	Newcastle	1415	500	Mon. to Fri., 8.30 a.m.-mid.; Sat., 11.30 a.m.-1.30, 6.30 p.m.-12.30 a.m.; Sun., 10.30-11.30 a.m.; 7.30-11.30 p.m.
3AW	Melbourne	1425	600	Mon. to Sat., 8-11.30 a.m., 12.30 p.m.-1 a.m.; Sun., 11.45 a.m.-2, 6 p.m.-mid.
2WL	Wollongong	1435	50	Daily 11.30 a.m.-1.30, 8-11.30 p.m.
4CA	Cairns	1450	50	Opening Shortly
4ZW	Dunedin	1450	50	Mon. to Sat., 8-11 a.m., 3-5, 7-11 p.m.; Sun., noon-2 p.m.
5MU	Murray Brid.	1450	100	Daily 9 a.m.-mid.
7UV	Ulverstone	1460	300	Mon. to Fri., 9-10.30 a.m., 7 p.m.-mid.; Sat., 9-10.30 a.m., 1.30 p.m.-12.30 a.m.; Sun., 1.30-3.30, 7-11.30 p.m.
3ZM	Christchurch	1470	100	Mon. to Thurs., 7.30-10 a.m., 5-6, 7-10 p.m.; Sat., 7.30-10 a.m., 8 p.m.-mid.; Sun., 11 a.m.-2, 5-6, 7-10 p.m.; Fri., 7.30-10 a.m.
6IX	Perth	1470	500	Mon. to Fri., noon-2.30, 9.30 p.m.-2.30 a.m.; Sat., noon-3.45, 9.30 p.m.-2.30 a.m.; Sun., 5-6.30, 9.30 p.m.-2 a.m.
2AY	Albury	1480	100	Mon. to Sat., 7 p.m.-mid.
2TM	Tamworth	1490	50	Mon. to Sat., 8.30-10.30 a.m., 1.30-3.30, 5-6, 7-11.30 p.m.; Sun., 1.30-3.30, 4.30-6.30, 8.30-11.30 p.m.
3AK	Melbourne	1500	200	Mon., 6.30-8.30 a.m., Tues. to Fri., 1-3.30, 6.30-8.30 a.m.; Sat., 1-3.30, 6.30-8.30 a.m., 2.30-3.30 p.m.; Sun. 1-4.30 a.m., 2-4, 11.30 p.m.-1.30a.m.

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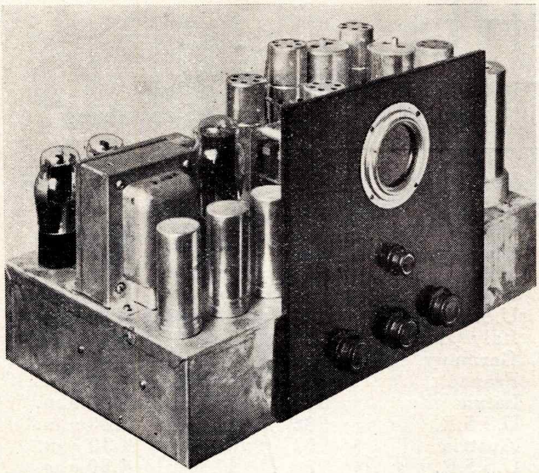

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N.Z. Time is equivalent to 8 p.m. in the respective countries

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Station	Country	Kc.	Watts	N.Z. Time
536—600 kilocycles		**559.7—499.7 metres**		
Wilno SP1O	Poland	536	16000	6.30 a.m.
* Budapest HAL	Hungary	546	120000	6.30 a.m.
* Beromünster	Switzerland	556	100000	6.30 a.m.
Athlone	Irish Free State	565	60000	7.30 a.m.
Gorkii RW42	U.S.S.R.	565	10000	5.30 a.m.
Palermo	Italy	565	4000	6.30 a.m.
* Stuttgart	Germany	574	100000	6.30 a.m.
Grenoble	France	583	15000	7.30 a.m.
Riga YLZ	Latvia	583	15000	5.30 a.m.
Arkhangelsk RW36	U.S.S.R.	586	10000	5.30 a.m.
* Vienna (Bisamberg)	Austria	592	120000	6.30 a.m.
Astrakhan RW35	U.S.S.R.	598	11800	4.30 a.m.
600—700 kilocycles		**499.7—428.3 metres**		
* Sundsvall	Sweden	601	10000	6.30 a.m.
* Florence	Italy	610	20000	6.30 a.m.
Mourmansk RW79	U.S.S.R.	610	10000	5.30 a.m.
* Brussels I	Belgium	620	15000	7.30 a.m.
Lisbon	Portugal	629	15000	7.30 a.m.
Trondelag	Norway	629	20000	6.30 a.m.
* Prague I	Czechoslovakia	638	120000	6.30 a.m.
Penza RW56	U.S.S.R.	640	1200	4.30 a.m.
Lyons (PTT)	France	648	15000	7.30 a.m.
Petrozavodsk RW29	U.S.S.R.	648	10000	5.30 a.m.
* Cologne	Germany	658	100000	6.30 a.m.
North Regional	Great Britain	668	50000	7.30 a.m.
Samara RW16	U.S.S.R.	668	10000	4.30 a.m.
Groznyi RW23	U.S.S.R.	677	1200	4.30 a.m.
* Sottens	Switzerland	677	25000	6.30 a.m.
* Belgrade	Yugoslavia	686	2500	6.30 a.m.
Kazan RW17	U.S.S.R.	686	10000	4.30 a.m.
* Paris	France	695	7000	7.30 a.m.
700—800 kilocycles		**428.3—374.8 metres**		
* Stockholm	Sweden	704	55000	6.30 a.m.
* Rome	Italy	713	50000	6.30 a.m.
Kiev RW9	U.S.S.R.	722	36000	5.30 a.m.
Madrid	Spain	731	3000	7.30 a.m.
Seville	Spain	731	1500	7.30 a.m.
Tallinn	Estonia	731	20000	5.30 a.m.
Saransk RW65	U.S.S.R.	734	700	4.30 a.m.
Munich	Germany	740	100000	6.30 a.m.
Tcheboksary RW74	U.S.S.R.	740	5000	4.30 a.m.
Marseilles (PTT)	France	749	5000	7.30 a.m.
Ordjonikidze RW64	U.S.S.R.	749	10000	4.30 a.m.
* Pori	Finland	749	1000	5.30 a.m.
Sortavala	Finland	749	200	5.30 a.m.
* Katowice	Poland	758	12000	6.30 a.m.
Ijevsk RW78	U.S.S.R.	767	4000	4.30 a.m.
Scottish Regional	Great Britain	767	50000	7.30 a.m.
Fredrikstad LKF	Norway	776	700	6.30 a.m.
Stalino RW26	U.S.S.R.	776	10000	5.30 a.m.

	Toulouse (PTT)	France	776	2000	6.30 a.m.
*	Barcelona EAJ1	Spain	785	5000	7.30 a.m.
*	Leipzig	Germany	785	120000	6.30 a.m.
*	Lwów	Poland	795	16000	6.30 a.m.
	Naltchik RW51	U.S.S.R.	795	1200	4.30 a.m.

800—900 kilocycles 374.8—333.1 metres

	West Regional	Great Britain	804	50000	7.30 a.m.
*	Milan	Italy	814	50000	6.30 a.m.
*	Bucharest	Roumania	823	12000	5.30 a.m.
*	Moscow RW39	U.S.S.R.	832	100000	4.30 a.m.
*	Berlin (Funkstunde)	Germany	841	100000	6.30 a.m.
	Aalesund LKA	Norway	850	350	6.30 a.m.
	Bergen LKB	Norway	850	1000	6.30 a.m.
	Bodo LKD	Norway	850	500	6.30 a.m.
	Porsgrunn LKP	Norway	850	700	6.30 a.m.
	Sofia	Bulgaria	850	1000	5.30 a.m.
	Valencia	Spain	850	1500	7.30 a.m.
	Simferopol RW73	U.S.S.R.	859	10000	5.30 a.m.
*	Strasbourg	France	859	25000	7.30 a.m.
	Agen	France	868	600	7.30 a.m.
	Poznan	Poland	868	16000	6.30 a.m.
	London Regional	Great Britain	877	50000	7.30 a.m.
*	Graz	Austria	886	7000	6.30 a.m.
	Iochkar Ola RW61	U.S.S.R.	888	1000	4.30 a.m.
*	Helsinki	Finland	895	10000	5.30 a.m.

900—1000 kilocycles 333.1—299.8 metres

*	Hamburg	Germany	904	100000	6.30 a.m.
	Dnepropetrovsk RW30	U.S.S.R.	913	2000	5.30 a.m.
	Limoges (PTT)	France	913	500	7.30 a.m.
*	Radio Toulouse	France	913	60000	7.30 a.m.
*	Brno	Czechoslovakia	922	32000	6.30 a.m.
*	Brussels No. 2	Belgium	932	15000	7.30 a.m.
	Engels RW55	U.S.S.R.	932	1000	4.30 a.m.
*	Göteborg	Sweden	941	10000	6.30 a.m.
*	Breslau	Germany	950	100000	6.30 a.m.
	Gomel RW40	U.S.S.R.	959	1200	5.30 a.m.
*	Poste Parisien, Paris	France	959	100000	7.30 a.m.
*	Odessa RW13	U.S.S.R.	968	10000	5.30 a.m.
	Oukhta RW67	U.S.S.R.	968	2000	5.30 a.m.
	Belfast	N. Ireland	977	1000	7.30 a.m.
*	Genoa	Italy	986	10000	6.30 a.m.
	Torun	Poland	986	16000	6.30 a.m.
*	Hilversum	Holland	995	20000	7.10 a.m.

1000—1100 kilocycles 299.8—272.6 metres

*	Bratislava	Czechoslovakia	1004	13500	6.30 a.m.
	Midland Regional	Great Britain	1013	50000	7.30 a.m.
	Tchernigov RW86	U.S.S.R.	1013	5000	5.30 a.m.
	Barcelona EAJ15	Spain	1022	3000	7.30 a.m.
*	Cracow	Poland	1022	2000	6.30 a.m.
	Oviedo EAJ19	Spain	1022	700	7.30 a.m.
*	Konigsberg	Germany	1031	100000	6.30 a.m.
	Parede	Portugal	1031	5000	7.30 a.m.
	Leningrad RW70	U.S.S.R.	1040	10000	5.30 a.m.
	Rennes (PTT)	France	1040	40000	7.30 a.m.
	Krasnodar RW33	U.S.S.R.	1050	1000	4.30 a.m.
	Scottish National	Great Britain	1050	50000	7.30 a.m.
*	Bari	Italy	1059	20000	6.30 a.m.
	Tiraspol RW57	U.S.S.R.	1068	4000	5.30 a.m.

* Bordeaux (Lafayette)	France	1077	12000	7.30 a.m.
Falun	Sweden	1086	2000	6.30 a.m.
Zagreb	Yugoslavia	1086	700	6.30 a.m.
* Madrid EAJ7	Spain	1095	7000	7.30 a.m.
Vinnitsa RW75	U.S.S.R.	1095	10000	5.30 a.m.

1100—1200 kilocycles 272.6—249.9 metres

* Madona	Latvia	1104	50000	5.30 a.m.
* Naples	Italy	1104	1500	6.30 a.m.
* Moravská-Ostrava	Czechoslovakia	1113	11200	6.30 a.m.
Newcastle	Great Britain	1122	1000	7.30 a.m.
* Nyiregyhaza	Hungary	1122	6200	6.30 a.m.
* Hörby	Sweden	1131	10000	6.30 a.m.
* Turin	Italy	1140	7000	6.30 a.m.
London National	Great Britain	1149	50000	7.30 a.m.
North National	Great Britain	1149	50000	7.30 a.m.
West National	Great Britain	1149	50000	7.30 a.m.
* Kosice	Czechoslovakia	1158	2600	6.30 a.m.
* Monte Ceneri	Switzerland	1167	15000	6.30 a.m.
* Copenhagen	Denmark	1176	10000	6.30 a.m.
Kharkov RW20	U.S.S.R.	1185	6000	5.30 a.m.
Cassel	Germany	1195	1500	6.30 a.m.
* Frankfurt	Germany	1195	17000	6.30 a.m.
Freiburg-im-Breisgau	Germany	1195	5000	6.30 a.m.
* Kaiserslautern	Germany	1195	1500	6.30 a.m.
Trier	Germany	1195	2000	6.30 a.m.

1200—1300 kilocycles 249.9—230.6 metres

Prague II	Czechoslovakia	1204	5000	6.30 a.m.
Tromsö LKM	Norway	1204	100	6.30 a.m.
Lille (PTT)	France	1213	5000	7.30 a.m.
* Trieste	Italy	1222	10000	6.30 a.m.
* Gleiwitz	Germany	1231	5000	6.30 a.m.
Cork	Irish Free State	1240	1000	7.30 a.m.
Relay Stations	Sweden	1240		6.30 a.m.
Juan-les-Pins	France	1249	2000	7.30 a.m.
Kuldiga	Latvia	1258	10000	5.30 a.m.
Rome 3RO	Italy	1258	1000	6.30 a.m.
San Sebastian	Spain	1258	3000	7.30 a.m.
Nürnberg	Germany	1267	2000	6.30 a.m.
Stavanger	Norway	1276	500	6.30 a.m.
Christiansand	Norway	1276	500	6.30 a.m.
Aberdeen	Great Britain	1285	1000	7.30 a.m.
* Dresden	Germany	1285	1500	6.30 a.m.
Dornbirn	Austria	1294	500	6.30 a.m.
* Linz	Austria	1294	500	6.30 a.m.
* Klagenfurt	Austria	1294	4200	6.30 a.m.
Vorarlberg	Austria	1294	2000	6.30 a.m.

1300—1400 kilocycles 230.6—214.2 metres

Danzig	Danzig Free City	1303	500	6.30 a.m.
Karlstad	Sweden	1312	250	6.30 a.m.
Malmo	Sweden	1312	1250	6.30 a.m.
Norrkoping	Sweden	1312	250	6.30 a.m.
Trollhattan	Sweden	1312	250	6.30 a.m.
* Magyaróvár HAE2	Hungary	1321	1250	6.30 a.m.
Bremen	Germany	1330	1500	6.30 a.m.
Flensburg	Germany	1330	1500	6.30 a.m.
Hanover	Germany	1330	1500	6.30 a.m.
Magdeburg	Germany	1330	1500	6.30 a.m.
Stettin	Germany	1330	1500	6.30 a.m.
Lodz SP7	Poland	1339	1700	6.30 a.m.
* Montpellier PTT	France	1339	5000	7.30 a.m.

Bordeaux-Sud-Ouest	France	1348	1000	7.30 a.m.
Dublin	Irish Free State	1348	500	7.30 a.m.
Konigsberg	Germany	1348	1500	6.30 a.m.
Milan 2MI	Italy	1348	4000	6.30 a.m.
Rjukan	Norway	1348	150	6.30 a.m.
Salzburg	Austria	1348	500	6.30 a.m.
Notodden LKN	Norway	1357	150	6.30 a.m.
Turin 2TO	Italy	1357	250	6.30 a.m.
Basle	Switzerland	1375	500	6.30 a.m.
Berne	Switzerland	1375	500	6.30 a.m.
Warsaw II	Poland	1384	2000	6.30 a.m.
Radio-Lyons	France	1393	5000	7.30 a.m.

1400—1530 kilocycles 214.2—196.1 metres

Relay Stations	Sweden	1402	200	6.30 a.m.
Relay Stations	Portugal	1411	2000	7.30 a.m.
Tampere OFE	Finland	1420	700	5.30 a.m.
Paris Radio LL	France	1424	800	7.30 a.m.
Beziers	France	1429	1500	7.30 a.m.
Turku OFG	Finland	1429	600	6.30 a.m.
* Miskolc HAE3	Hungary	1438	1250	5.30 a.m.
Relay Stations	Spain	1447	400	7.30 a.m.
* Fecamp	France	1456	10000	7.30 a.m.
Antwerp	Belgium	1465	100	7.30 a.m.
Courtrai	Belgium	1465	100	7.30 a.m.
Pecs HAE4	Hungary	1465	1250	6.30 a.m.
Bournemouth	Great Britain	1474	1000	7.30 a.m.
Plymouth	Great Britain	1474	300	7.30 a.m.
Binche	Belgium	1492	100	7.30 a.m.
Chatelineau	Belgium	1492	100	7.30 a.m.
Nîmes	France	1492	200	7.30 a.m.
Wallonia	Belgium	1492	100	7.30 a.m.
Liege	Belgium	1500	100	7.30 a.m.
Pietarsaari	Finland	1500	250	5.30 a.m.
Radio-Cointe	Belgium	1500	100	7.30 a.m.
Seraing	Belgium	1500	100	7.30 a.m.
Verviers	Belgium	1500	100	7.30 a.m.
Karlskrona SCJ	Sweden	1530	200	6.30 a.m.

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THE WORLD . . .

530 kcs. 565.6 m.

Call	Location	Kc.	Power
	Wilno, Poland	536	16000

540 kcs. 555.2 m.

Call	Location	Kc.	Power
CJRM	Moose Jaw, Sask.		1000
XEAF	Nogales, Mex.		250
	Budapest No. 1, Hungary	546	120000

550 kcs. 545.1 m.

Call	Location	Kc.	Power
CFNB	Fredericton, N.B.		500
KFUO	St. Louis, Mo.		500
KFYR	Bismarck, N. Dak.		1000
KOAC	Corvallis, Ore.		1000
KSD	St. Louis, Mo.		1000
KTSA	San Antonio, Texas		1000
TISO	San Jose, C. Rica		250
WDEV	Waterbury, Vt.		500
WGR	Buffalo, N.Y.		1000
WKRC	Cincinnati, Ohio		1000
WSVA	Staunton, Va.		500
	Beromunster, Switz.	556	100000

560 kcs. 535.4 m.

Call	Location	Kc.	Power
KFDM	Beaumont, Texas		500
KLZ	Denver, Colo.		1000
KTAB	San Francisco, Cal.		1000
KWTO	Springfield, Mo.		1000
WFIL	Philadelphia, Pa.		1000
WIND	Gary, Ind.		1000
WIS	Columbia, S.C.		1000
WQAM	Miami, Fla.		1000
XEAO	Mexicali, Mex.		250
XLHB	Shanghai, China		45
ZTG	Grahamstown, S. Af.		10000
2CO	Corowa, Aust.		7125
	Athlone, Irish Free State	565	60000
	Gorkii, U.S.S.R.	565	10000
	Palermo, Italy	565	4000
TGW	Guatemala, Gua.	565	10000

570 kcs. 526.0 m.

Call	Location	Kc.	Power
CX2	Montevideo, Urug.		
KGKO	Wichita Falls, Tex.		500
KMTR	Hollywood, Cal.		500
KVI	Tacoma, Wash.		1000
MTCY	Hsinking, Manch.		100000
WKBN	Youngstown, O.		500
WMCA	New York, N.Y.		500
WNAX	Yankton, S. Dak.		1000
WOSU	Columbus, O.		750
WSYR	Syracuse, N.Y.		250
WWNC	Asheville, N.C.		1000
XGOH	Changsha, China		1000
2YA	Wellington, N.Z.		5000
	Stuttgart, Germany	574	100000

580 kcs. 516.9 m.

Call	Location	Kc	Power
CHRC	Quebec, Que.		100
CKCL	Toronto, Ont.		100
CKUA	Edmonton, Alta.		500
KMJ	Fresno, Calif.		500
KSAC	Manhattan, Kans.		500
WCHS	Charleston, W.Va.		500
WDBO	Orlando, Fla.		1000
WIBW	Topeka, Kans.		1000
WTAG	Worcester, Mass.		500
XQHA	Shanghai, China		250
7ZL	Hobart, Aust.		1200
	Grenoble, France	583	15000
	Riga, Latvia	583	15000
CE58	Santiago, Chile	585	1000
	Arkhangelsk, U.S.S.R.	586	10000

590 kcs. 508.2 m.

Call	Location	Kc	Power
JOAK-2	Tokyo, Japan		10000
KHQ	Spokane, Wash.		1000
LS10	Buenos Aires, Arg.		2870
WEEI	Boston, Mass.		1000
WKZO	Kalamazoo, Mich.		1000
WOW	Omaha, Neb.		1000
XEPN	Piedras Negras, M.		50000
	Vienna (Bisamberg) Aus.	592	120000
	Astrakhan, U.S.S.R.	598	11800

600 kcs. 499.7 m.

Call	Location	Kc	Power
CFCF	Montreal, Que.		400
CJOR	Vancouver, B.C.		500
CRCW	Windsor, Ont.		1000
KFSD	San Diego, Cal.		1000
WCAC	Storrs, Conn.		500
WCAO	Baltimore, Md.		500
WICC	Bridgeport, Conn.		500
WMT	Waterloo, Iowa		1000
WREC	Memphis, Tenn.		1000
XMHA	Shanghai, China		600
ZTC	Capetown, S. Af.		10000
CNR	Rabat, Morocco	601	6500
	Sundsvall, Sweden	601	10000
FQN	S. Pierre, Mq'lon	609	250

610 kcs. 491.5 m.

Call	Location	Kc	Power
CMCF	Havana, Cuba		250
CX4	Montevideo, Urgy.		1000
JODK-2	Seoul, Korea		10000
KFRC	San Francisco, Cal.		1000
WDAF	Kansas City, Mo.		1000
WIP	Philadelphia, Pa.		1000
WJAY	Cleveland, O.		500
XFX	Mexico City, Mex.		500
XGSS	Tsunshi, China		15
3AR	Melbourne, Aust.		4500
	Florence, Italy		20000

Mourmansk, U.S.S.R.		10000
KZRM—Manila, P.I.	618.5	50000

620 kcs. 483.6 m.

KGW—Portland, Ore.		1000
KTAR—Phoenix, Ariz.		1000
LV3—Cordoba, Arg.		1800
WFLA—Clearwater, Fla.		1000
WHJB—Greensburg, Pa.		250
WLBZ—Bangor, Maine		500
WSUN—St. Petersburg, F.		1000
WTMJ—Milwaukee, Wis.		1000
4ZP—Invercargill, N.Z.		500
Brussels No. 1, Belgium		15000
Cairo, Egypt		20000
CE62—Santiago, Chile	625	1500
JOTK—Matsuye, Japan	625	500
Lisbon, Portugal	629	15000
Trondelag, Norway	629	20000

630 kcs. 475.9 m.

CFCY—Char'town, P.E.I.		1000
CJGX—Yorkton, Sask.		500
CKOV—Kelowna, B.C.		100
KFRU—Columbia, Mo.		500
KGFX—Pierre, S. Dak.		200
LS3—Buenos Aires, Arg.		5070
WGBF—Evansville, Ind.		500
WMAL—Washington, D.C.		250
WOS—Jefferson City, Mo.		500
WPRO—Providence, R.I.		250
XEZ—Merida, Mex.		500
CMBY—Havana, Cuba	635	250
JODG—Hamamatsu, Jap.	635	500
5CK—Crystal Brook, Aust.	635	7500
Vladivostok, U.S.S.R.	635.6	300
Prague 1, Czechoslovakia	638	120000

640 kcs. 468.5 m.

KFI—Los Angeles, C.		50000
WAIU—Columbus, Ohio		500
WOI—Ames, Iowa		5000
XEOX—Saltillo, Mex.		250
ZEK—Hong-kong, China		2000
Penza, U.S.S.R.		1200
—Shanghai, China		100
JOUK—Akita, Japan	645	300
ZTJ—Joh'burg, S. Africa	645	10000
Lyons (PTT), France	648	15000
Petrozavodsk, U.S.S.R.	648	10000

650 kcs. 461.3 m.

CX6—Montevideo, Urgy.		10000
WSM—Nashville, Tenn.		50000
1YA—Auckland, N.Z.		10000
JQAK—Dairen, Manch.	652	500
JOCG—Asahigawa, Japan	655	300
Cologne, Germany	658	100000

660 kcs. 454.3 m

WAAW—Omaha, Neb.		500
WEAF—New York, N.Y.		50000
XGOA—Nanking, China		75000
Alexandrovsk, U.S.S.R.	662.2	2000
CE66—Santiago, Chile	665	1000
2FC—Sydney, Aust.	665	5000
North Regional, Gt. Brit.	668	50000
Samara, U.S.S.R.	668	10000

670 kcs. 447.5 m.

JFAK—Taihoku, Formosa		10000
LS4—Buenos Aires, Arg.		5090
WMAQ—Chicago, Ill.		50000
MTFY—Harbin, Manch.	674	1000
YV6RV—Valencia, Venez.	675	3000
Groznyi, U.S.S.R.	677	1200
Sottens, Switz.	677	25000

680 kcs. 440.9 m.

CMAF—Havana, Cuba		1000
CMCQ—Havana, Cuba		1000
JOLK—Fukuoka, Japan		500
JOVK—Hakodate, Japan		500
KFEQ—St. Joseph, Mo.		2500
KPO—San Francisco, Cal.		50000
RDN—San Salvador, E.S.		500
WPTF—Raleigh, N. C.		5000
HJN—Bogota, Colombia	681	1000
VOWR—St. John's, N'fld.	681	500
ZEC—Salisbury, S. R'desia	682	1500
VAS—Glace Bay, N.S.	685	2000
Belgrade, Yugoslavia,	686	2500
Kazan, U.S.S.R.	686	10000

690 kcs. 434.5 m.

CFRB—Toronto, Ont.		10000
CJCJ—Calgary, Alta.		100
CX8—Montevideo, Urgy.		1000
NAA—Arlington, Va.		1000
XET—Monterrey, Mex.		500
6WF—Perth, Aust.		3500
Paris, France	695	7000
XGOY—Yunnan-fu, Ch.	697.6	250

700 kcs. 428.3 m.

JOKK—Okayama, Japan		500
WLW—Cincinnati, Ohio		500000
XMHC—Shanghai, China		500
Stockholm, Sweden	704	55000
CE70—Santiago, Chile	705	1000
VPB—Colombo, Ceylon	705	1750

710 kcs. 422.3 m.

JOJK—Kanazawa, Japan		3000
KMPC—Beverly Hills, C.		500
KPCB—Seattle, Wash.		250
LS1—Buenos Aires, Arg.		5000
WOR—Newark, N.J.		50000
XEN—Mexico City, Mex.	711	1000
XGOS—Chunking, China	711	1000
Rome, Italy	713	50000
TIFB—San Jose, C.R.	714	30
XGML—Kashing, China	714.3	7½

720 kcs. 416.4 m.

JFBK—Tainan, Japan		1000
JORK—Kochi, Japan		500
WGN—Chicago, Ill.		50000
XLHC—Shanghai, China		50
XLHD—Shanghai, China		50
3YA—Christchurch, N.Z.		2500
Kiev, U.S.S.R.	722	36000
CMK—Havana, Cuba	725	3150

730 kcs. 410.7 m.

CFPL—London, Ont.		100
CJCA—Edmonton, Alta.		1000
CKAC—Montreal, Que.		5000
CX10—Montevideo, Urgy.		1000
LVI—San Juan, Arg.		640
XEBC—Aguacaliente, Mex.		5000
XHGS—Wuchow, China		50
5CL—Adelaide, Aust.		3500
Madrid, Spain	731	3000
Seville, Spain	731	1500
Tallinn, Estonia	731	20000
Saransk, U.S.S.R.	734	700
JOSK—Kokura, Japan	735	1000

740 kcs. 405.2 m.

KMMJ—Clay Center, Neb.		1000
KTRB—Modesto, Calif.		250
WHEB—Portsmouth, N.H.		250
WSB—Atlanta, Ga.		50000
XELC—Mexico City, Mex.		100
XHHB—Shanghai, China		50
Munich, Ger.		100000
Tcheboksary, U.S.S.R.		5000
CE74—Santiago, Chile	745	1000
ZTD—Durban, S. Africa	749	1000
Marseilles (PTT), France	749	5000
Ordjonikidze,U.S.S.R.	749	10000
Pori, Finland	749	1000
Sortavala, Finland	749	200

750 kcs. 399.8 m.

HS7PJ—Sala Daeng, Siam		10000
JOBK-1—Osaka, Japan		10000
KGU—Honolulu, Hawaii		2500
LR7—Buenos Aires, Arg.		2000
LUHO—Tung Hsien, China		20
OAX4A—Lima, Peru		1500
PRA2—Rio de Janeiro, Braz.		1500
PRA8—Recife, Braz.		500
WJR—Detroit, Mich.		10000
XGOK—Canton, China		1000
—Tientsin, China		20
2YB—New Plymouth, N.Z.		100
7NT—Kelso, Aust.		7000
CMCW—Havana, Cuba	755	150
Katowice, Poland	758	12000

760 kcs. 394.5 m.

CE76—Valparaiso, Chile		10000
KXA—Seattle, Wash.		250
LT4—Mendoza, Arg.		200
WBAL—Baltimore, Md.		10000
WEW—St. Louis, Mo.		1000
WJZ—New York, N.Y.		50000
XLHI—Shanghai, China		7½
XLHJ—Shanghai, China		100
4QG—Brisbane, Aust.		5000
Ijevsk, U.S.S.R.	767	4000
Scot. Regional, Gt. Brit.	767	50000

770 kcs. 389.4 m.

CX12—Montevideo, Urgy.		1000
JOHK—Sendai, Japan		10000
KFAB—Lincoln, Neb.		5000
VUM—Madras, India		200
WBBM—Chicago, Ill.		25000
1ZH—Hamilton, N.Z.		40
CMBS—Havana, Cuba	775	150
ZTE—Bloemfontein, S. Af.	776	500
Fredrikstad, Norway	776	700
Stalino, U.S.S.R.	776	10000
Toulouse, France	776	2000

780 kcs. 384.4 m.

CHWK—Chilliwack, B.C.		100
CKSO—Sudbury, Ont.		1000
JOPK—Shizuoka, Japan		500
KELW—Burbank, Calif.		500
KFDY—Brookings, S.D.		1000
KFQD—Anchorage, Alaska		250
KGHL—Billings, Mont.		1000
KTM—Los Angeles, Calif.		500
KZEG—Manila, Philippine Is.		1000
LT1—Rosario, Arg.		3700
WEAN—Providence, R.I.		500
WMC—Memphis, Tenn.		1000
WTAR—Norfolk, Va.		500
XEYZ—Mexico City, Mex.		10000
XHHC—Shanghai, China		100
CE78—Santiago, Chile	785	1000
Barcelona, Spain	785	5000
Leipzig, Germany	785	120000

790 kcs. 379.5 m.

CMJK—Camaguey, Cuba		150
JOGK—Kumamoto, Japan		10000
KGO—San Francisco, Cal.		7500
LR10—Buenos Aires, Arg.		11050
WGY—Schenectady, N.Y.		50000
4YA—Dunedin, N.Z.		500
Lwow, Poland	795	16000
Naltchik, U.S.S.R.	795	1200

800 kcs. 374.8 m.

LU2—Bahia Blanca, Arg.		500
PRB7—Rio de Janeiro, Braz.		500
TIGP—San Jose, C.R.		75
WBAP—Fort Worth, Tex.		50000
WFAA—Dallas, Texas		50000
WTBO—Cumberland, Md.		250
XLHK—Shanghai, China		7½
XLHL—Shanghai, China		100
ZTM—Milnerton, S. Af.		10000

3LO—Melbourne, Aust.		3500
West Regional, Gt. Brit.	804	50000
CE81—Valparaiso, Chile	805	100

810 kcs. 370.2 m.

CX14—Montevideo, Urgy.		5000
JOCK-1—Nagoya, Japan		10000
VUC—Calcutta, India		3000
WCCO—Minneapolis, Minn.		50000
WNYC—New York, N.Y.		1000
XFC—Aguacaliente, Mex.		350
Peiping, China		100
Milan, Italy	814	50000

820 kcs. 365.6 m.

LV7—Tucuman, Arg.		300
WHAS—Louisville, Ky.		50000
XETW—Mexico City, Mex.		500
XQHB—Shanghai, China		30
2ZH—Napier, N.Z.		65
Bucharest, Roumania	823	12000
CE82—Santiago, Chile	825	1000

830 kcs. 361.2 m.

JOIK—Sapporo, Japan		10000
KOA—Denver, Colo.		50000
LR5—Buenos Aires, Arg.		30000
WEEU—Reading, Pa.		1000
WHDH—Boston, Mass.		1000
WRUF—Gainesville, Fla.		5000
XGWH—Wuhu, China		30
3GI—Longford, Australia		7000
Moscow, U.S.S.R.	832	100000
XGF—Tsinan, China	833.3	7½
CMC—Havana, Cuba	835	500
TIVL—San Jose, C.R.	835	30

840 kcs. 356.9 m.

CFQC—Saskatoon, Sask.		1000
CMQ—Havana, Cuba		5000
CRCT—Toronto, Ont.		5000
F3ICD—Saigon, Indo-China		4000
LT8—Rosario, Arg.		460
VOGY—St. Johns, N'f'd.		400
XEP—Mexico City, Mex.		500
XGTM—Changsha, China		15
XHHA—Shanghai, China		150
2YC—Wellington, N.Z.		200
Berlin, Germany	841	100000
XEXX—Mexico City, Mex.	845	500
ZBW—Hong Kong, China	845	2000

850 kcs. 352.7 m.

CX16—Montevideo, Urgy.		2500
JOFK—Hiroshima, Japan		10000
KIEV—Glendale, Calif.		250
WWL—New Orleans, La.		10000
WWPA—Clarion, Pa.		250
Aalesund, Norway		350
Bergen, Norway		1000
Bodo, Norway		500
Hangchow, China		50
Porsgrunn, Norway		700
Sofia, Bulgaria		1000
Valencia, Spain		1500
7LO—Nairobi, Kenya	852	700
VUB—Bombay, India	855	3000
2BL—Sydney, Aust.	855	3000
HSP1—Bangkok, Siam	856	2500
PRA4—Baia, Brazil	857	50
PRA6—Sao Paulo, Brazil	857	1000
PRB3—Juiz de Fora, Braz.	857	250
Simferopol, U.S.S.R.	859	10000
Strasbourg, France	859	25000

860 kcs. 348.6 m.

LV10—Mendoza, Arg.		430
PRA3—Rio de Janeiro, Braz.		2500
WABC—New York, N.Y.		50000
WHB—Kansas City, Mo.		1000
XGOF—Tsinan, China		500
XHHD—Shanghai, China		50
CE86—Santiago, Chile	865	1000
CMCX—Havana, Cuba	865	150
XEMO—Tijuana, Mex.	865	2500
Agen, France	868	600
Poznan, Poland	868	16000

870 kcs. 344.6 m.

JOAK-1—Tokyo, Japan		10000
LR6—Buenos Aires, Arg.		39000
WENR—Chicago, Ill.		50000
WLS—Chicago, Ill.		50000
XLIL—Suchow, China		25
CMX—Havana, Cuba	875	1000
London Regional, Gt. Brit.	877	50000

880 kcs. 340.7 m.

CE88—Vina del Mar, Chile		1000
CFJC—Kamloops, B.C.		100
CRCO—Ottawa, Ont.		1000
KFKA—Greeley, Colo.		500
KLX—Oakland, Calif.		1000
KPOF—Denver, Colo.		500
LV2—Cordoba, Arg.		1593
WCOC—Meridian, Miss.		500
WGBI—Scranton, Pa.		500
WPHR—Petersburg, Va.		500
WQAN—Scranton, Pa.		250
WSUI—Iowa City, Iowa		500
XHHV—Shanghai, China		100
1YX—Auckland, N.Z.		150
6PR—Perth, Australia		500
PRB2—Curitiba, Brazil	882	250
Graz, Austria	886	7000
ZP9—Asuncion, Para.	887	
Iochkar Ola, U.S.S.R.	888	1000

890 kcs. 336.9 m.

CJIC—S. Ste Marie, Ont.		100
CX18—Montevideo, Urgy.		750
KARK—Little Rock, Ark.		250
KFNF—Shenandoah, Iowa		500
KUSD—Vermillion, S. Dak.		500

MTBY—Mukden, Manchu-ko		2000
WBAA—W. Lafayette, Ind.		1000
WGST—Atlanta, Ga.		250
WILL—Urbana, Ill.		250
WJAR—Providence, R.I.		500
WMMN—Fairmont, W. Va.		250
XEW—Mexico City, Mex.		50000
7HO—Hobart, Australia		100
XGKA—Kashing, China	895	15
Helsinki, Finland	895	10000

900 kcs. 333.1 m.

JODK-1—Seoul, Korea		10000
KGBU—Ketchikan, Alaska		500
KHJ—Los Angeles, Calif.		1000
KSEI—Pocatello, Calif.		250
LV9—Salta, Arg.		500
WBEN—Buffalo, N.Y.		1000
WJAX—Jacksonville, Fla.		1000
WKY—Oklahoma City, Okla.		1000
WLBL—Stevens Point, Wis.		2500
WMFI—New Haven, Conn.		500
2ZP—Wairoa, N.Z.		250
3MA—Mildura, Australia		50
4WK—Warwick, Australia		50
Hamburg, Germany	904	100000
CE90—Santiago, Chile	905	1000

910 kcs. 329.6 m.

CJAT—Trial, B.C.		250
CMHW—Cienfuegos, Cuba		100
CRCM—Montreal, Que.		5000
LR2—Buenos Aires, Arg.		9620
XENT—Nuevo Laredo, Mex.		60000
4RK—Rockhampton, Aust.		5000
TICR—San Jose, C.R.	911	75
Dnepropetrovsk, U.S.S.R.	913	2000
Limoges, France	913	500
Radio Toulouse, France	913	60000

920 kcs. 325.9 m.

CW19—Salto, Urgy.		100
HHK—Port-au-Prince, Haiti		1000
JOQK—Niigata, Japan		500
KFEL—Denver, Colo.		500
KOMO—Seattle, Wash.		1000
KPRC—Houston, Texas		1000
KVOD—Denver, Colo.		500
PRC3—Pelotas, Braz.		250
WAAF—Chicago, Ill.		500
WBSO—Babson Park, Mass.		500
WPEN—Philadelphia, Pa.		250
WRAX—Philadelphia, Pa.		250
WSPA—Spartanburg, S.C.		1000
WWJ—Detroit, Mich.		1000
XEAA—Mexicali, Mex.		200
XEFE—Nuevo Laredo, Mex.		250
XHHX—Shanghai, China		1000
Brno, Czechoslovakia	922	32000
CE92—Temuco, Chile	923	100

930 kcs. 322.4 m.

CFAC—Calgary, Alta.		100
CFCH—North Bay, Ont.		100
CFLC—Prescott, Ont.		100
CHNS—Halifax, N.S.		1000
CKPC—Brantford, Ont.		100
CKPR—Fort William, Ont.		100
CMJF—Camaguey, Cuba		200
CMW—Havana, Cuba,		1400
CX20—Montevideo, Urgy.		2000
JOAG—Nagasaki, Japan		500
KGBZ—York, Neb.		1000
KMA—Shenandoah, Iowa		1000
KROW—Oakland, Calif.		500
WBRC—Birmingham, Ala.		1000
WDBJ—Roanoke, Va.		1000
3UZ—Melbourne, Aust.		650
Brussels No. 2, Belgium	932	15000
Engels, U.S.S.R.	932	1000
VUG—Delhi, India	933	1000
PRB6—Sao Paulo, Brazil	934	250
HSP3—Bangkok, Siam	937	
Haiphong, Indo-China	938	2000

940 kcs. 319.0 m.

CMKM—Marzanillo, Cuba		100
JONK—Nagano, Japan		500
KOIN—Portland, Ore.		1000
VOAS—St. John's N'fld.		100
WAAT—Jersey City, N.J.		500
WAVE—Louisville, Ky.		1000
WCSH—Portland, Maine		1000
WDAY—Fargo, N. Dak.		1000
WHA—Madison, Wis.		2500
XEFO—Mexico City, Mex.		5000
XHHE—Shanghai, China		1000
3ZR—Greymouth, N.Z.		400
5RM—Renmark, Aust.		1000
Algiers, Algeria	941	12000
Goteburg, Sweden	941	10000
CE94—Santiago, Chile	945	1000
2GB—Sydney, Aust.	949	1000

950 kcs. 315.6 m.

CMHD—Caibarien, Cuba		250
CRCS—Chicoutimi, Que.		100
KFWB—Hollywood, Calif.		1000
KHSL—Chico, Calif.		250
KMBC—Kansas City, Mo.		1000
LR3—Buenos Aires, Arg.		13900
VONF—St. John's, N'fld.		5000
WRC—Washington, D.C.		500
XGOP—Peiping, China		100
Breslau, Germany		100000
ZTP—Pretoria, S. Africa	952	50
CMCD—Havana, Cuba,	955	500
Gomel, U.S.S.R.	959	1200
Poste Parisien, France	959	100000

960 kcs. 312.3 m.

CKY—Winnipeg, Man.		15000
CMJL—Camaguey, Cuba		50

JOOK—Kyoto, Japan		300
XEAM—Nuevo Laredo, Mex.		50
XEAW—Reynosa, Mex.		10000
XHHF—Shanghai, China		100
YV1RC—Caracas, Venez.		5000
2ZF—Palmerston N., N.Z.		250
5DN—Adelaide, Australia		300
PRC6—Rio de Janeiro, B.	967	1000
Odessa, U.S.S.R.	968	10000
Oukhta, U.S.S.R.	968	2000

970 kcs. 309.1 m.

CX22—Montevideo, Urgy.		250
JOBG—Maebashi, Japan		500
KJR—Seattle, Wash.		5000
WCFL—Chicago, Ill.		1500
WIBG—Glenside, Pa.		100
XLCH—Wusih, China		75
3BO—Bendigo, Australia		200
CMGF—Matanzas, Cuba	972	100
Belfast, N. Ireland	977	1000

980 kcs. 303.9 m.

JOXK—Tokushima, Japan		500
KDKA—Pittsburgh, Pa.		50000
XMHB—Shanghai, China		500
2ZJ—Gisborne, N.Z.		60
4AY—Ayr, Australia		50
6BY—Bunbury, Australia		50
CNO—Casablanca, Moroc.	983	25
CE98—Santiago, Chile	985	1000
Genoa, Italy	986	10000
Torun, Poland	986	16000

990 kcs. 302.8 m.

JOFG—Fukui, Japan		300
LR4—Buenos Aires, Arg.		15960
WBZ—Boston, Mass.		50000
WBZA—Springfield, Mass.		1000
XEK—Mexico City, Mex.		100
XES—Tampico, Mex.		250
XGCK—Chuching, China		7½
Hilversum, Holland	995	20000

1000 kcs. 299.8 m.

CW23—Salto, Urgy.		250
HJ4ABC—Pereira, Col.		50
KFVD—Los Angeles, Calif.		250
PRB4—Santos, Brazil		1000
PRB8—M. das Cruzes, Braz.		50
WHO—Des Moines, Iowa		50000
XGOD—Hangchow, China		1000
XKRI—Canton, China		100
XOTY—Taiyuan, China		50
ZP3—Asuncion, Paraguay		300
4GR—Toowoomba, Aust.		50
Bratislava, Czechoslovak.	1004	13500
CMBZ—Havana, Cuba	1005	100
HJ3ABH—Bogota, Col.	1005	1000
XGMK—Poatung, China	1005	15

1010 kcs. 296.9 m.

CE101—Vina del Mar, Chile		100
CHML—Hamilton, Ont.		50
CHWC—Regina, Sask.		500
CKCD—Vancouver, B.C.		100
CKCK—Regina, Sask.		500
CKCO—Ottawa, Ont.		100
CKIC—Wolfville, N.S.		50
CKWX—Vancouver, B.C.		100
CMJO—Ciego de Avila, Cuba		50
CX24—Montevideo, Urgy.		10000
KGGF—Coffeyville, Kan.		1000
KQW—San Jose, Calif.		1000
WHN—New York, N.Y.		1000
WNAD—Norman, Okla.		1000
WNOX—Knoxville, Tenn.		1000
XGOW—Hankow, China		2000
XEU—Veracruz, Mex.		250
3HA—Hamilton, Australia		300
Mid. Regional, Gt. Brit.	1013	50000
Tchernigov, U.S.S.R.	1013	5000
TIGA—Cartago, C.R.	1014	30
PRB9—Sao Paulo, Bra.	1017	500

1020 kcs. 293.9 m.

KYW—Philadelphia, Pa.		10000
XEJ—Juarez, Mex		1250
XHHG—Shanghai, China		100
Barcelona, Spain	1022	3000
Cracow, Poland	1022	2000
Oviedo, Spain	1022	700
CE100—Santiago, Chile	1025	100
CE102—Santiago, Chile	1025	100
2UE—Sydney, Aus.	1025	3000

1030 kcs. 291.1 m.

CFCN—Calgary, Alta.		10000
CKLW—Windsor, Ont.		5000
LR9—Buenos Aires, Arg.		3880
XEB—Mexico City, Mex.		10000
XGOF—Foochow, China		1000
Konigsberg, Germany	1031	100000
Parede, Portugal	1031	5000
CMKC—Santiago, Cuba	1034	150
CE103—Valdivia, Chile	1035	100
CMBC—Havana, Cuba	1035	150
YV11RMO—M'caibo, V.	1035	
CMHI—Santa Clara, Cu.	1037	150

1040 kcs. 288.3 m.

CE104—Magallanes, Chile		100
CMGH—Matanzas, Cuba		15
CP4—La Paz, Bolivia		10000
CW25—Durazno, Urgy.		500
KRLD—Dallas, Texas		10000
KWJJ—Portland, Ore.		500
WKAR—East Lansing, Mich.		1000
WTIC—Hartford, Conn.		50000
XHHH—Shanghai, China		100
5PI—Crystal Brook, Aust.		2000
Leningrad, U.S.S.R.		10000
Rennes PTT, France		40000

1050 kcs. 285.5 m.

CE105—Valparaiso, Chile		100
CFCO—Chatham, Ont.		100
CMJG—Camaguey, Cuba		50
CRCK—Quebec, Que.		1000
CX26—Montevideo, Urgy.		2000
KFBI—Abilene, Kans.		5000
KNX—Hollywood, Calif.		50000
XHKA—Tientsin, China		100
2CA—Canberra, Australia		500
4ZB—Dunedin, N.Z.		30
4ZM—Dunedin, N.Z.		30
4ZO—Dunedin, N.Z.		20
Krasnodar, U.S.S.R.		1000
Scottish National, Gt. Brit.		50000
Bari, Italy	1059	20000

1060 kcs. 282.8 m.

CMCB—Havana, Cuba		150
KTHS—Hot Springs, Ark.		10000
LT9—Santa Fe, Arg.		600
WBAL—Baltimore, Md.		10000
WJAG—Norfolk, Neb.		1000
XEA—Guadalajara, Mex.		125
XHHI—Shanghai, China		100
3YB—Melbourne, Aust.		25
4MB—Maryborough, Aust.		50
CE106—Santiago, Chile	1065	500
CE107—Santiago, Chile	1065	100
Tiraspol, U.S.S.R.	1068	4000

1070 kcs. 280.2 m.

KJBS—San Francisco, Calif.		500
LR1—Buenos Aires, Arg.		
WCAZ—Carthage, Ill.		100
WDZ—Tuscola, Ill.		100
WTAM—Cleveland, Ohio		50000
XGOE—Nanning, China		1000
XGOX—Honan-fu, China		200
2KY—Sydney, Aust.		1000
HC2JSB—Guayaquil, Ec.	1071	30
Bordeaux (Lafayette) Fr.	1077	12000

1080 kcs. 277.6 m.

CE108—Concepcion, Chile		100
CW27—Salto, Urgy.		250
LT3—Rosario, Arg.		4200
WBT—Charlotte, N. Car.		50000
WCBD—Waukegan, Ill.		5000
WMBI—Chicago, Ill.		5000
XEMA—Tampico, Mex.		50
XHHJ—Shanghai, China		200
3SH—Swan Hill, Australia		50
JOBK-2—Osaka, Japan	1085	10000
Falun, Sweden	1086	2000
Zagreb, Yugoslavia	1086	700

1090 kcs. 275.1 m.

CE109—Valparaiso, Ch.		100
CX28—Montevideo, Urgy.		3000
KMOX—St. Louis, Mo.		50000
WESG—Elmira, N.Y.		1000
XGOB—Loyang, China		250
1ZB—Auckland, N.Z.		100
6AM—Northam, Aust.		500
Shuhing, China		
PRC2—Porto Alegre, Br.	1091	500
PRC7—Belo H'zonte, Br.	1091	250
CMGI—Colon, Cuba	1094	30
Madrid, Spain	1095	7000
Vinnitsa, U.S.S.R.	1095	10000

1100 kcs. 272.6 m.

CMCY—Havana, Cuba		500
CRCV—Vancouver, B.C.		1000
KGDM—Stockton, Calif.		250
KWHK—Shreveport, La.		10000
TIRCA—San Jose, C.R.		500
WLWL—New York, N.Y.		5000
WPG—Atlantic City, N.J.		5000
XEFG—Mexico City, Mex.		250
XHHS—Shanghai, China		100
7LA—Launceston, Tas.		300
CMHA—Sagua la Gr., C.	1103	50
Madona, Latvia	1104	50000
Naples, Italy	1104	1500
CE110—Santiago, Chile	1105	100

1110 kcs. 270.1 m.

HJ3ABD—Bogota, Colom.		50
KSOO—Sioux Falls, S.D.		2500
LS5—Buenos Aires, Arg.		5060
WRVA—Richmond, Va.		5000
XELO—Piedras Negras, M.		10000
2HD—Newcastle, Australia		500
PRB5—Franca, Bra.	1111	50
Moravská-Ostrava, Cze.	1113	11200
CE111—Osorno, Chile	1115	100

1120 kcs. 267.7 m.

CHLP—Montreal, Que.		100
CHSJ—St. John, N.B.		100
CKOC—Hamilton, Ont.		500
CKX—Brandon, Man.		100
CW29—Mercedes, Urgy.		50
KFIO—Spokane, Wash.		100
KFSG—Los Angeles, Calif.		1000
KRKD—Los Angeles, Calif.		1000
KRSC—Seattle, Wash.		100
LV5—San Juan, Arg.		340
WDEL—Wilmington, Del.		250
WISN—Milwaukee, Wis.		250
WMFH—Boston, Mass.		500
WTAW—College Stn., Tex.		500
XLHM—Shanghai, China		50
XLHN—Shanghai, China		200
Alexandria, Egypt	1122	250
Newcastle, Gt. Brit.	1122	1000
Nyiregyhaza, Hungary	1122	6200
CMCG—Havana, Cuba	1125	150
CMHJ—Cienfuegos, Cu.	1125	40
2UW—Sydney, Aust.	1125	1000

1130 kcs. 265.3 m.

CE113—Chillan, Chile		100

CX30—Montevideo, Urgy.		500
KSL—Salt Lake City, Utah		50000
WJJD—Chicago, Ill.		20000
WOV—New York, N.Y.		1000
XGOC—Nan-chang, Ch.		500
Horby, Sweden	1131	10000
ZP1—Asuncion, Para.	1135	1000
6ML—Perth, Australia	1135	500

1140 kcs. 263.0 m.

KVOO—Tulsa, Okla.		25000
WAPI—Birmingham, Ala.		5000
XHHL—Shanghai, China		100
4YO—Dunedin, N.Z.		150
Turin, Italy		7000
CE114—Santiago, Chile	1145	100
4BC—Brisbane, Aust.	1145	1000
London Nat., Gt. Brit.	1149	50000
North Nat., Gt. Brit.	1149	50000
West Nat., Gt. Brit.	1149	50000

1150 kcs. 260.7 m.

CMBG—Havana, Cuba		225
CMJH—Ciego de Avila, Cuba		50
LR8—Buenos Aires, Arg.		3540
OA4O—Lima, Peru		200
WHAM—Rochester, N.Y.		50000
XEH—Monterrey, Mex.		250
XEWZ—Mexico City, Mex.		100
XGGW—Tengchow, China		50
XKYY—Tsangchow, China		15
2ZM—Gisborne, N.Z.		15
2WG—Wagga, Aust.		50
PRA7—Sao Paulo, Braz.	1154	50
PRA9—Rio de Janeiro	1154	1000
CE115—Talca, Chile	1155	100
2WG—Wagga, Aust.	1155	50
Kosice, Czechoslovakia	1158	2600

1160 kcs. 258.5 m.

CW31—Salto, Urgy.		250
LT5—Resistencia, Arg.		500
WOWO—Fort Wayne, Ind.		10000
WWVA—Wheeling, W. Va.		5000
XED—Guadalajara, Mex.		500
XEFL—Tijuana, Mex.		500
XEU—Veracruz, Mex.		250
XHHU—Shanghai, China		100
Monte Ceneri, Switz.	1167	15000

1170 kcs. 256.3 m.

CE117—Santiago, Chile		250
CMJE—Camaguey, Cuba		50
CX32—Montevideo, Urgy.		500
WCAU—Philadelphia, Pa.		50000
XLIF—Wusih, China		30
2ZD—Masterton, N.Z.		9
4TO—Townsville, Aus.		200
COA—Havana, Cuba	1175	500
JOCK-2—Nagoya, Japan	1175	10000
PRC9—Campinas, Braz.	1175	250
Copenhagen, Denmark	1176	10000

1180 kcs. 254.1 m.

CE119—Magallanes, Chile		100
KEX—Portland, Ore.		5000
KOB—Albuquerque, N.Mex.		10000
WDGY—Minneapolis, Minn.		1000
WINS—New York, N.Y.		1000
WMAZ—Macon, Ga.		1000
XEFA—Mexico City, Mex.		500
XHHM—Shanghai, China		100
3DB—Melbourne, Aust.		600
VE9EK—M'magny, Que.	1185	10
Kharkov, U.S.S.R.	1185	6000

1190 kcs. 252.0 m.

LS2—Buenos Aires, Arg.		30000
WATR—Waterbury, Conn.		100
WOAI—San Antonio, Texas		50000
WSAZ—Huntington, W. Va.		1000
4MK—Mackay, Australia		100
XLKA—Peiping, China	1194	30
HIJ—Santo Domingo, D.R.	1195	15
Cassel, Germany	1195	1500
Frankfurt, Germany	1195	17000
Freiburg-im-Breisgau, G.	1195	5000
Kaiserslautern, Germany	1195	1500
Trier, Germany	1195	2000

1200 kcs. 249.9 m.

CE118—Santiago, Chile	100
CHAB—Moose Jaw, Sask.	100
CKTB—St. Catherines, Ont.	100
CMCJ—Havana, Cuba	400
CW33—Florida, Urgy.	75
HJ3ABE—Bogota, Colom.	50
KADA—Ada, Okla.	100
KBTM—Jonesboro, Ark.	100
KFJB—Marshalltown, Iowa	100
KFXD—Nampa, Idaho	100
KFXJ—Grand Junction, Colo.	100
KGDE—Fergus Falls, Minn.	100
KGEK—Sterling, Colo.	100
KGFJ—Los Angeles, Calif.	100
KGHI—Little Rock, Ark.	100
KMLB—Monroe, La.	100
KOOS—Marshfield, Ore.	100
KSUN—Lowell, Ariz	100
KVOS—Bellingham, Wash.	100
KWG—Stockton, Calif.	100
OAX4B—Lima, Peru	250
PRD3—Taubate, Brazil	250
VUL—Lahore, India	100
WABI—Bangor, Maine	100
WBBZ—Ponca City, Okla.	100
WBNO—New Orleans, La.	100
WCAT—Rapid City, S.Dak.	100
WCAX—Burlington, Vt.	100
WCLO—Janesville, Wis.	100
WFAM—South Bend, Ind.	100
WFBE—Cincinnati, Ohio	100
WHBC—Canton, Ohio	100
WHBY—Green Bay, Wis.	100
WIBX—Utica, N.Y.	100

WIL—St. Louis, Mo.		100
WJBC—Bloomington, Ill.		100
WJBL—Decatur, Ill.		100
WJBW—New Orleans, La.		100
WKBO—Harrisburg, Pa.		100
WKJC—Lancaster, Pa.		100
WLVA—Lynchburg, Va.		100
WMFM—Anderson, S.C.		100
WMPC—Lapeer, Mich.		100
WNBO—Washington, Pa.		100
WRBL—Columbus, Ga.		100
WWAE—Hammond, Ind.		100
XHHN—Shanghai, China		100
YV3RC—Caracas, Venez.		1000
3YL—Christchurch, N.Z.		500
5KA—Adelaide, Aust.		300
10AK—Stratford, Ont.		15
10BP—Wingham, Ont.		25
Bangkok, Siam		
Prague II, Czechoslovak.	1204	5000
Tromsö, Norway	1204	100
CE120—Curico, Chile	1205	100

1210 kcs. 247.8 m.

CE121—Vina del Mar, Ch.		100
CHNC—New Carlisle, Que.		100
CJCU—Aklairk, N.W.T.		50
CKBI—Prince Albert, Sask.		100
CKCH—Hull, Que.		100
CKMC—Cobalt, Ont.		50
CMJI—Ciego de Avila, Cuba		150
CX34—Montevideo, Urgy.		500
KASA—Elk City, Okla.		100
KDLR—Devils Lake, N.D.		100
KFJI—Klamath Falls, Ore.		100
KFOR—Lincoln, Neb.		100
KFPW—Fort Smith, Ark.		100
KFVS—Cape Giradeau, Mo.		100
KFXM—San Bernardino, Calif.		100
KGY—Olympia, Wash.		100
KIEM—Eureka, Calif.		100
KPPC—Pasadena, Calif.		50
KWEA—Shreveport, La.		100
KWFV—Hilo, Hawaii		100
KWTN—Watertown, S.D.		100
WALR—Zanesville, Ohio		100
WBAX—Wilkes-Barre, Pa.		100
WBBL—Richmond, Va.		100
WBRB—Red Bank, N.J.		100
WCBS—Springfield, Ill.		100
WCOL—Columbus, Ohio		100
WCRW—Chicago, Ill.		100
WEBQ—Harrisburg, Ill.		100
WEDC—Chicago, Ill.		100
WFAS—White Plains, N.Y.		100
WGBB—Freeport, N.Y.		100
WGCM—Gulfport, Miss.		100
WGNY—Chester, N.Y.		100
WHBF—Rock Island, Ill.		100
WHBU—Anderson, Ind.		100
WIBU—Poynette, Wis.		100
WJBY—Gadsden, Ala.		100
WJEJ—Hagerstown, Md.		100
WJIM—Lansing, Mich.		100
WJW—Akron, Ohio		100
WKOK—Sunbury, Pa.		100
WMBG—Richmond, Va.		100
WMFG—Hibbing. Minn.		100
WMFN—Clarksdale, Miss.		100
WOCL—Jamestown, N.Y.		50
WOMT—Manitowoc, Wis.		100
WPAX—Thomasville, Ga.		100
WSBC—Chicago, Ill		100
WSIX—Springfield, Tenn.		100
WSOC—Charlotte, N.C.		100
WTAX—Springfield, Ill.		100
XEE—Durango, Mex.		50
XEFV—Juarez, Mex.		100
XETH—Puebla, Mex.		100
XLPH—Pinghu, China		15
XLTC—Wusih, China		15
2CH—Sydney, Australia		1000
Lille (PTT), France	1213	5000

1220 kcs. 245.8 m.

KFKU—Lawrence, Kan.		1000
KTW—Seattle, Wash.		1000
KWSC—Pullman, Wash.		1000
PRE3—Rio de Janeiro, Brazil.		5000
WCAD—Canton, N.Y.		500
WCAE—Pittsburgh, Pa.		1000
WDAE—Tampa, Fla.		1000
WREN—Lawrence, Kans.		1000
XETF—Veracruz, Mex.		12
XGOT—Peiping, China		500
2GF—Grafton, Australia		50
4ZL—Dunedin, N.Z.		100
6KG—Kalgoorlie, Aust.		85
Trieste, Italy	1222	10000
CE122—Santiago, Chile	1225	250
CMHK—Cruces, Cuba	1225	50

1230 kcs. 243.8 m.

CJOC—Lethbridge, Alta.		100
CMCA—Havana, Cuba		150
CMOK—Havana, Cuba		25
KGBX—Springfield, Mo.		500
KGGM—Albuquerque, N.Mex.		250
KYA—San Francisco, Calif.		1000
LS8—Buenos Aires, Arg.		15460
WFBM—Indianapolis, Ind.		1000
WNAC—Boston, Mass.		1000
XEFJ—Monterrey, Mex.		100
XLKB—Tientsin, China		50
YNOP—Managua, Nicaragua		1000
Gleiwitz, Germany	1231	5000

1240 kcs. 241.8 m.

CJCB—Sydney, N.S.		1000
CW35—Paysandu, Urgy.		30
KGCU—Mandan, N.Dak.		250
KLPM—Minot, N.Dak.		250
KTAT—Fort Worth, Texas		1000
KTFI—Twin Falls, Idaho		1000
WKAQ—San Juan, P.R.		1000

WXYZ—Detroit, Mich.		1000
XEAI—Mexico City, Mex.		100
XEKL—Leon. Mex.		500
XELA—Saltillo, Mex.		50
XHHY—Shanghai, China		100
2ZL—Hastings, N.Z.		50
Cork, Irish Free State		1000
Relay Stations, Sweden		
CE124—Concepcion, Ch.	1245	100
CMHB—San Spiritus, Cu.	1245	30
2NC—Newcastle, Aus.	1245	2000
Juan-les-Pins, France	1249	2000

1250 kcs. 239.9 m.

CE125—Valparaiso, Chile		100
CPX—La Paz, Bolivia		5000
CX36—Montevideo, Urgy.		250
HC2IB—Guayaquil, Ec.		50
KFOX—Long Beach, Calif.		1000
MABS—Siangyang, Ch.		35
WCAL—Northfield, Minn.		1000
WDSU—New Orleans, La.		1000
WHBI—Newark, N.J.		1000
WLB—Minneapolis, Minn.		1000
WNEW—Newark, N.J.		1000
WTCN—Minneapolis, Minn.		1000
XLWU—Wusih, China		50
CMCU—Havana, Cuba	1255	150
Kuldiga, Latvia	1258	10000
Rome 3RO, Italy	1258	1000
San Sebastian, Spain	1258	3000

1260 kcs. 238.0 m.

CFRN—Edmonton, Alta.		100
KGVO—Missoula, Mont.		1000
KOIL—Council Bluffs, Iowa		1000
KPAC—Port Arthur, Tex.		500
KRGV—Weslaco, Texas		500
KUOA—Fayetteville, Ark.		1000
KVOA—Tucson, Ariz.		500
WHIO—Dayton, Ohio		1000
WNBX—Springfield, Vt.		1000
WTOC—Savannah, Ga.		1000
XHHP—Shanghai, China		100
1ZM—Manurewa, N.Z.		50
3WR—Shepparton, Aust.		50
CE126—Santiago, Chile	1265	100
Nurnberg, Germany	1267	2000

1270 kcs. 236.1 m.

CMCP—Havana, Cuba		150
HIX—Santo Domingo, D.R.		1000
KGCA—Decorah, Iowa		100
KOL—Seattle, Wash.		1000
KVOR—Colorado Spr., Colo.		1000
KWLC—Decorah, Iowa		100
LS9—Buenos Aires, Arg.		3500
WASH—Grand Rapids, Mich.		500
WFBR—Baltimore, Md.		500
WJDX—Jackson, Miss.		1000
WOOD—Grand Rapids, Mich.		500
XDYF—Wuhu, China		15
XEG—Ensenada, Mex.		500
XFB—Jalapa, Mex.		1000
2SM—Sydney, Australia		1000
ZP4—Asuncion, Para.	1275	150
Christiansand, Norway	1276	500
Stavanger, Norway	1276	500

1280 kcs. 234.2 m.

CE128—Temuco, Chile		500
CMCO—Havana, Cuba		150
CW37—Colonia, Urgy.		20
KFBB—Great Falls, Mont.		1000
LU7—Bahia Blanca, Arg.		1400
WCAM—Camden, N.J.		500
WCAP—Asbury Park, N.J.		500
WDOD—Chattanooga, Tenn.		1000
WIBA—Madison, Wis.		1000
WORC—Worcester, Mass.		500
WRR—Dallas, Texas		500
WTNJ—Trenton, N.J.		500
XEMX—Mexico City, Mex.		12
XHHQ—Shanghai, China		80
3TR—Sale, Australia		250
4ZC—Cromwell, N.Z.		7
Tientsin, China		100
Aberdeen, Great Britain	1285	1000
Dresden, Germany	1285	1500

1290 kcs. 232.4 m.

CX38—Montevideo, Urgy.		500
HI1ABA—Barranquilla, Col.		
KDYL—Salt Lake City, Utah		1000
KLCN—Blytheville, Ark.		100
WEBC—Superior, Wis.		1000
WJAS—Pittsburgh, Pa.		1000
WNBZ—Saranac Lake, N.Y.		100
WNEL—San Juan, P.R.		500
4BK—Brisbane, Aus.		200
Dornbirn, Austria	1294	500
Klagenfurt, Austria	1294	4200
Linz, Austria	1294	500
Vorarlberg, Austria	1294	2000
PRA5—Sao Paulo, Braz.	1295	100

1300 kcs. 230.6 m.

CMKJ—Guantanamo, Cuba		20
HIZ—Santo Domingo, D.R.		10
KALE—Portland, Ore.		500
KFAC—Los Angeles, Calif.		1000
KFH—Wichita, Kans.		1000
KFJR—Portland, Ore.		500
PRC8—Rio de Janeiro, Braz.		250
VOAC—St. John's, Nfld.		40
WBBR—Brooklyn, N.Y.		1000
WEVD—New York, N.Y.		1000
WFAB—New York, N.Y.		1000
WFBC—Greenville, S.C.		1000
WHAZ—Troy, N.Y.		500
WIOD—Miami, Fla.		1000
XQHC—Shanghai, China		400
3BA—Ballarat, Australia		50
Danzig, Danzig Free City	1303	500

PRC4—Amparo, Braz.	1304	50
CE130—Santiago, Chile	1305	100
CE131—Santiago, Chile	1305	100

1310 kcs. 228.9 m.

CHCK—Charlottetown, P.E.I.		50
CJKL—Kirkland Lake, Ont.		100
CJLS—Yarmouth, N.S.		100
CKCV—Quebec, Que.		50
KCRJ—Jerome, Ariz.		100
KFBK—Sacramento, Calif.		100
KFPL—Dublin, Texas		100
KFPM—Greenville, Texas		15
KFXR—Oklahoma City, Okla.		100
KFYO—Lubbock, Texas		100
KGCX—Wolf Point, Mont.		100
KGEZ—Kalispell, Mont.		100
KGFW—Kearney, Neb.		100
KIT—Yakima, Wash.		100
KIUJ—Sante Fe, N.M.		100
KMED—Medford, Ore.		100
KRMD—Shreveport, La.		100
KTSM—El Paso, Texas		100
KXRO—Aberdeen, Wash.		100
WAML—Laurel, Miss.		100
WBEO—Marquette, Mich.		100
WBOW—Terre Haute, Ind.		100
WBRE—Wilkes-Barre, Pa.		100
WCLS—Joliet, Ill.		100
WDAH—El Paso, Texas		100
WEBR—Buffalo, N.Y.		100
WEXL—Royal Oak, Mich.		50
WFBG—Altoona, Pa.		100
WFDF—Flint, Mich.		100
WGH—Newport News, Va.		100
WHAT—Philadelphia, Pa.		100
WJAC—Johnstown, Pa.		100
WLBC—Muncie, Ind.		50
WLNH—Laconia, N.H.		100
WMBO—Auburn, N.Y.		100
WMFF—Plattsburg, N.Y.		100
WNBH—New Bedford, Mass.		100
WOL—Washington, D.C.		100
WRAW—Reading, Pa.		100
WROL—Knoxville, Tenn.		100
WSAJ—Grove City, Pa.		100
WSGN—Birmingham, Ala.		100
WSJS—Winston-Salem, N.Car.		100
WTEL—Philadelphia, Pa.		100
WTJS—Jackson, Tenn.		100
WTRC—Elkhart, Ind.		50
XEAJ—Cazaca, Mex.		15
XEC—Tijuana, Mex.		50
XECW—Mexico City, Mex.		10
XEFC—Merida, Mex.		100
XEFW—Tampico, Mex.		250
XELM—Mineral Del Monte, M.		15
XETB—Torreon, Mex.		125
XEX—Monterrey, Mex.		125
XLIJ—Wusih, China		50
1ZI—Auckland, N.Z.		40
5AD—Adelaide, Australia		300
Karlstad, Sweden	1312	250
Malmo, Sweden	1312	1250
Norrkoping, Sweden	1312	250
Trollhattan, Sweden	1312	250

1320 kcs. 227.1 m.

CMCK—Havana, Cuba		100
CW39—Paysandu, Urgy.		30
KGHF—Pueblo, Colo.		500
KGMB—Honolulu, Hawaii		250
KID—Idaho Falls, Idaho		250
KSO—Des Moines, Iowa		500
WADC—Akron, Ohio		1000
WSMB—New Orleans, La.		500
XLIA—Ningpo, China		15
2MO—Gunnedah, Aust.		50
Magyaróvar, Hungary	1321	1250
CE132—Rancagua, Chile	1325	100
CMOX—Havana, Cuba	1325	200

1330 kcs. 225.4 m.

CX40—Montevideo, Urgy.		500
KGB—San Diego, Calif.		1000
KMO—Tacoma, Wash.		250
KSCJ—Sioux City, Iowa		1000
KTRH—Houston, Tex.		500
PRE2—Rio de Janeiro, Br.		500
WDRC—Hartford, Conn.		1000
WORK—York, Pa.		1000
WSAI—Cincinnati, Ohio		1000
WTAQ—Eau Claire, Wis.		1000
XLIK—Changchow, China		50
4RO—Rockhampton, Aust.		50
Bremen, Germany		1500
Flensburg, Germany		1500
Hanover, Germany		1500
Magdeburg, Germany		1500
Stettin, Germany		1500
CE133—Osorno, Chile	1335	100
XGSA—Kiangyin, China	1335	10
Lodz, Poland	1339	1700
Montpellier (PTT), Fr.	1339	5000

1340 kcs. 223.7 m.

KFPY—Spokane, Wash.		1000
KGDY—Huron, S.D.		250
KGNO—Dodge City, Kans.		250
WCOA—Pensacola, Fla.		500
WFEA—Manchester, N.H.		500
WSPD—Toledo, Ohio		1000
XFD—Orizaba, Mex.		250
XHHR—Shanghai, China		50
2XN—Lismore, Australia		50
4ZR—Balclutha, N.Z.		4
CE134—Santiago, Chile	1345	150
Bordeaux-Sud-Ouest, Fr.	1348	1000
Cairo, Egypt	1348	
Dublin, Irish Free State,	1348	500
Konigsberg, Germany	1348	1500
Milan, Italy	1348	4000
Rjukan, Norway	1348	150
Salzburg, Austria	1348	500

1350 kcs. 222.1 m.

CMBD—Havana, Cuba		150

KIDO—Boise, Idaho		1000
KWK—St. Louis, Mo.		1000
LS6—Buenos Aires, Arg.		4000
PRD2—Rio de Janeiro, Braz.		1000
WAWZ—Zarephath, N.J.		250
WBNX—New York, N.Y.		250
3KZ—Melbourne, Aust.		600
Notodden, Norway	1357	150
Turin II, Italy	1357	250

1360 kcs. 220.4 m.

CMJP—Moron, Cuba		75
CW41—San Jose, Urgy.		50
KGER—Long Beach, Calif.		1000
KGIR—Butte, Mont.		500
OAX4C—Lima, Peru		5000
WCSC—Charleston, S.Car.		500
WFBL—Syracuse, N.Y.		1000
WGES—Chicago, Ill.		500
WQBC—Vicksburg, Miss.		1000
WSBT—South Bend, Ind.		500
XQHD—Shanghai, China		200
2BH—Broken Hill, Aust.		100
2ZR—Nelson, N.Z.		50
7BU—Burnie, Aust.		50
CMKF—Holquin, Cuba	1363	30
PRC5—Belem, Braz.	1364	100
PRD4—Araraquara, Br.	1364	250

1370 kcs. 218.8 m.

CKCW—Moncton, N.B.		100
CX42—Montevideo, Urgy.		1000
KCRC—Enid, Okla.		100
KELD—El Dorado, Ark.		100
KERN—Bakersfield, Calif.		100
KFGQ—Boone, Iowa		100
KFJM—Grand Forks, N.Dak.		100
KFJZ—Fort Worth, Texas		100
KFRO—Longview, Texas		100
KGAR—Tucson, Ariz.		100
KGFG—Oklahoma Cy, Okla.		100
KGFL—Roswell, N.Mex.		100
KGKL—San Angelo, Texas		100
KICA—Clovis, N. Mex.		100
KLUF—Galveston, Texas		100
KMAC—San Antonio, Tex.		100
KONO—San Antonio, Tex.		100
KRE—Berkeley, Calif.		100
KRKO—Everett, Wash.		50
KSLM—Salem, Ore.		100
KUJ—Walla Walla, Wash.		100
KVL—Seattle, Wash.		100
KWKC—Kansas City, Mo.		100
KWYO—Sheridan, Wyo.		100
WABY—Albany, N.Y.		100
WAGF—Dothan, Ala.		100
WBTM—Danville, Va.		100
WCBM—Baltimore, Md.		100
WDAS—Philadelphia, Pa.		100
WGL—Fort Wayne, Ind.		100
WHBD—Mount Orab, O.		100
WHBQ—Memphis, Tenn.		100
WHDF—Calumet, Mich.		100
WIBM—Jackson, Mich.		100
WJTL—Atlanta, Ga.		100
WLLH—Lowell, Mass.		100
WMBR—Jacksonville, Fla.		100
WMFD—Wilmington, N.C.		100
WOC—Davenport, Iowa		100
WPFB—Hattiesburg, Miss.		100
WQDM—St. Albans, Vt.		100
WRAK—Williamsport, Pa.		100
WRDO—Augusta, Maine		100
WRJN—Racine, Wis.		100
WSVS—Buffalo, N.Y.		50
XEFZ—Mexico City, Mex.		100
XEI—Morelia, Mex.		125
XEZZ—San Luis Potosi, Mex.		100
XHHA—Hangchow, China		50
3HS—Horsham, Australia		50
Decator, Ala.		100
CMGE—Cardenas, Cuba	1375	30
Basle, Switzerland	1375	500
Berne, Switzerland	1375	500

1380 kcs. 217.3 m.

KOH—Reno, Nev.		500
KQV—Pittsburgh, Pa.		500
LU6—Mar del Plata, Arg.		50
WALA—Mobile, Ala.		500
WKBH—LaCrosse, Wis.		1000
WMFE—New Britain, Conn.		250
WSMK—Dayton, Ohio		200
XLHE—Shanghai, China		75
XLHF—Shanghai, China		50
4BH—Brisbane, Aust.		600
CMJC—Camaguey, Cuba	1382	150
Warsaw II, Poland	1384	2000
CE138—Santiago, Chile	1385	100

1390 kcs. 215.7 m.

CE139—Rancagua, Chile		100
CJRC—Winnipeg, Man.		100
KLRA—Little Rock, Ark.		1000
KOY—Phoenix, Ariz.		500
LT10—Sante Fe, Arg.		800
WHK—Cleveland, Ohio		1000
2GN—Goulburn, Aust.		100
Wusih, China		50
Radio Lyons, France	1393	5000
HIH—San Pedro, D.R.	1395	15

1400 kcs. 214.2 m.

CMCR—Havana, Cuba		150
CW43—Melo, Uruguay		20
FFZ—Shanghai, China		250
KLO—Ogden, Utah		500
KTUL—Tulsa, Okla.		500
PRD5—Rio de Janeiro, Braz.		1000
TGX—Guatemala City, Gua.		150
WARD—Brooklyn, N.Y.		500
WBBC—Brooklyn, N.Y.		500
WKBF—Indianapolis, Ind.		500
WLTH—Brooklyn, N.Y.		500
WVFW—Brooklyn, N.Y.		500

XLHO—Shanghai, China		100
2ZO—Palmerston N., N.Z.		100
3GL—Geelong, Aust.		50
Relay Stations, Sweden	1402	200

1410 kcs. 212.6 m.

CE141—Concepcion, Chile		100
CKFC—Vancouver, B.C.		50
CKMO—Vancouver, B.C.		100
CX44—Montevideo, Urgy.		200
KGRS—Amarillo, Texas		1000
WAAB—Boston, Mass.		500
WBCM—Bay City, Mich.		500
WDAG—Amarillo, Texas		1000
WHBL—Sheboygan, Wis.		500
WHIS—Bluefield, W. Va.		250
WRBX—Roanoke, Va.		250
WROK—Rockford, Ill.		500
WSFA—Montgomery, Ala.		500
Relay Stations, Portugal	1411	2000
2KO—Newcastle, Aus.	1415	500

1420 kcs. 211.1 m.

CKGB—Timmins, Ont.		100
CKNC—Toronto, Ont.		100
KABC—San Antonio, Tex.		100
KABN—Aberdeen, S.D.		100
KBPS—Portland, Ore.		100
KCMC—Texarkana, Ark.		100
KFIZ—Fond du Lac, Wis.		100
KGFF—Shawnee, Okla.		100
KGGC—San Francisco, Cal.		100
KGIW—Alamosa, Colo.		100
KGIX—Las Vegas, Nev.		100
KIDW—Lamar, Colo.		100
KORE—Eugene, Ore.		100
KRLC—Lewiston, Idaho		100
KUMA—Yuma, Ariz.		100
KXL—Portland, Ore.		100
WACO—Waco, Texas		100
WAGM—Presque Isle, Maine		100
WAZL—Hazelton, Pa.		100
WEED—Rocky Mount, N.C.		100
WEHC—Charlottesville, Va.		100
WEHS—Cicero, Ill.		100
WELL—Battle Creek, Mich.		50
WGPC—Albany, Ga.		100
WHDL—Olean, N.Y.		100
WHFC—Cicero, Ill.		100
WILM—Wilmington, Del.		100
WJBO—Baton Rouge, La.		100
WJMS—Ironwood, Mich.		100
WKBI—Cicero, Ill.		100
WLAP—Lexington, Ky.		100
WLBF—Kansas City, Kans.		100
WLEU—Erie, Pa.		100
WMAS—Springfield, Mass.		100
WMBC—Detroit, Mich.		100
WMBH—Joplin, Mo.		100
WMFJ—Daytona Beach, Fla.		100
WNRA—Muscle Shoals, Ala.		100
WPAD—Paducah, Ky.		100
WPRP—Ponce, P.R.		100
WWC—Spartanburg, S.C.		1000
XEAZ—Guanjuato, Mex.		100
XEFB—Monterrey, Mex.		100
XHHK—Shanghai, China		100
Tampere, Finland		700
Paris Radio LL, France	1424	800
CE142—Santiago, Chile	1425	100
3AW—Melbourne, Aus.	1425	600
Alexandria, Egypt	1429	
Beziers, France	1429	1500
Turku, Finland	1429	600

1430 kcs. 209.7 m.

CE143—Magallanes, Chile		100
KECA—Los Angeles, Cal.		1000
KGNF—North Platte, Neb.		500
KRNT—Cedar Rapids, Iowa		250
LS11—La Plata, Arg.		1500
WBNS—Columbus, Ohio		500
WHEC—Rochester, N.Y.		500
WHP—Harrisburg, Pa.		500
WNBR—Memphis, Tenn.		500
WOKO—Albany, N.Y.		500
CMBX—Havana, Cuba	1435	150
2WL—Wollongong, Aus.	1435	50
Miskolc, Hungary	1438	1250

1440 kcs. 208.2 m.

CW45—Durazno, Urgy.		30
KDFN—Casper, Wyo.		500
KLS—Oakland, Calif.		250
KXYZ—Houston, Texas		500
WBIG—Greensboro, N. Car.		500
WCBA—Allentown, Pa.		500
WMBD—Peoria, Ill.		500
WSAN—Allentown, Pa.		500
WTAD—Quincy, Ill.		500
XEFI—Chihuahua, Mex.		250
XLHQ—Shanghai, China		30
Relay Stations, Spain	1447	400

1450 kcs. 206.8 m.

CE145—Rancagua, Chile		100
CFCT—Victoria, B.C.		75
CHGS—Summerside, P.E.I.		50
CX46—Montevideo, Urgy.		100
KTBS—Shreveport, La.		1000
WGAR—Cleveland, Ohio		500
WHOM—Jersey City, N.J.		250
WSAR—Fall River, Mass.		250
WTFI—Athens, Ga.		500
XLIB—Suchow, China		15
4CA—Cairns, Aust.		50
4ZW—Dunedin, N.Z.		50
5MU—Murray Bridge, Aust.		50
Fecamp, France	1456	10000

1460 kcs. 205.4 m.

KSTP—St. Paul, Minn.		10000
WJSV—Washington, D.C.		10000
XQHE—Shanghai, China		250
7UV—Ulverstone, Aust.		300

CE146—Santiago, Chile	1465	100
ZP5—Asuncion, Para.	1465	150
Antwerp, Belgium	1465	100
Courtrai, Belgium	1465	100
Pecs, Hungary	1465	1250

1470 kcs. 204.0 m.

KGA—Spokane, Wash.		5000
LU9—Azul, Arg.		50
WLAC—Nashville, Tenn.		5000
XGDZ—Changchow, China		10
XOMO—Peiping, China		250
3ZM—Christchurch, N.Z.		100
6IX—Perth, Australia		500
Bournemouth, Gt. Brit.	1474	1000
Plymouth, Great Brit.	1474	300

1480 kcs. 202.6 m.

CW47—Canelones, Urgy.	100
KOMA—Oklahoma City, Okla.	5000
WKBW—Buffalo, N.Y.	5000
XQHF—Shanghai, China	200
2AY—Albury, Australia	100

1490 kcs. 201.2 m.

CX48—Montevideo, Urgy.		1500
WCKY—Covington, Ky.		5000
XLKS—Kashing, China		20
2TM—Tamworth, Aust.		50
EAJ21—Melilla, Moroc.	1492	100
EAJ43—Santa Cruz de Teneriffe, Canary Islands	1492	100
EAJ46 Ceuta, Morocco	1492	100
EAJ50—Las Palmas, C.Is.	1492	250
Binche, Belgium,	1492	100
Chatelineau, Belgium	1492	100
Nîmes, France	1492	200
Wallonia, Belgium	1492	100

1500 kcs. 199.9 m.

CMCN—Havana, Cuba	250
KDB—Santa Barbara, Cal.	100
KGFI—Corpus Christi, Tex.	100
KGFK—Moorhead, Minn.	100
KGKB—Tyler, Texas	100
KGKY—Scottsbluff, Neb.	100
KNOW—Austin, Texas	100
KOTN—Pine Bluff, Ark.	100
KPJM—Prescott, Ariz.	100
KPQ—Wenatchee, Wash.	100
KREG—Santa Ana, Cal.	100
KXO—El Centro, Calif.	100
WCNW—Brooklyn, N.Y.	100
WDNC—Durham, N.C.	100
WGAL—Lancaster, Pa.	100
WHEF—Kosciusko, Miss.	100
WJBK—Detroit, Mich.	100
WKBB—E. Dubuque, Ill.	100
WKBV—Richmond, Ind.	100
WKBZ—Muskegon, Mich.	100
WKEU—Griffin, Ga.	100
WMBQ—Brooklyn, N.Y.	100
WMEX—Boston, Mass.	100
WNBF—Binghamton, N.Y.	100
WOPI—Bristol, Tenn.	100
WRDW—Augusta, Ga.	100
WRGA—Rome, Ga.	100
WSYB—Rutland, Vt.	100
WWRL—Woodside, N.Y.	100
WWSW—Pittsburgh, Pa.	100
XHHT—Shanghai. China	100
XOCL—Tsinan, China	7½
3AK—Melbourne, Aust.	200
Liege, Belgium	100
Pietarsaari, Finland	250
Radio-Cointe, Belgium	100
Seraing, Belgium	100
Verviers, Belgium	100

1510 kcs. 198.6 m.

CFRC—Kingston, Ont.	100
CKCR—Waterloo, Ont.	100

1530 kcs. 196.0 m.

WIXBS—Waterbury, Conn.	1000
W9XBY—Kansas City, Mo.	1000
Karlskrona, Sweden	200

1550 kcs. 193.4 m.

W2XR—Long Island, N.Y.	1000
W6XAI—Bakersfield, Cal.	1000

STOP PRESS

Owing to the fact that this issue is off the press some two or three weeks later than was originally intended, many Listeners may have the idea that some of the information is "stale" by the time it reaches their hands. This is not so. We assert positively that "Radio Calls of the World" is up-to-date at the time of publication. In fact, our reason for delaying publication has been largely on account of our desire that this issue should be complete and authoritative. It is guaranteed correct, so far as is humanly possible, up to the 17th. of April, and every known change of call sign, power or location was made up to that date.

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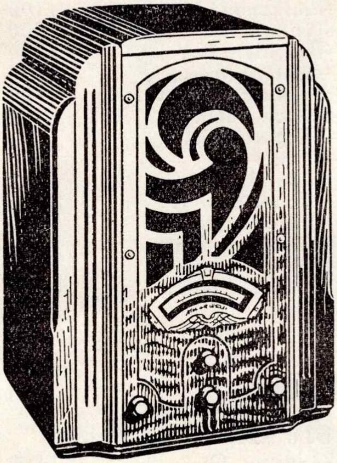
Super-Heterodyne RADIO

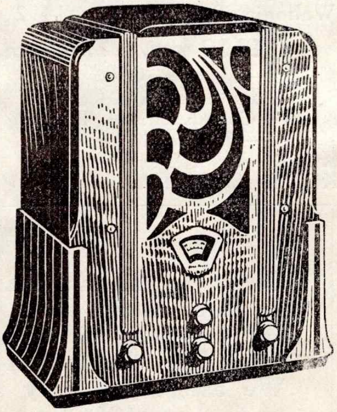


MODEL 1261

Undoubtedly—the radio sensation of the year is the remarkable ALL-WAVE performance of Stewart-Warner. The MAGIC DIAL—4 radios in 1—with its four bands, covers everything from 13 to 550 metres. No missing stations. Left—Model 1261—7 tube MAGIC DIAL all-wave (not merely dual-wave) Super-Heterodyne—Table cabinet of graceful design. Two-speed tuning simplifies station selection.

MODEL 1271

An outstanding 5 tube all-wave receiver—not merely dual-wave. Automatic volume control. Covers the same wave-bands as model 1261. Cabinet of beautifully grained walnut. Full variable tone control. Image pre-selector. Special Doublet Aerial system. Extra-heavy dynamic speaker gives absolutely faithful reproduction.



Hope Gibbons Ltd (Radio Division)
Auckland Christchurch Wellington
Eadie Bros. (N.Z.) Ltd. Dunedin Invercargill

SHORT WAVE . . .

The schedules and frequencies which appear in this section are believed to be correct at date of going to press, but as many stations are still in the experimental stage, changes may be expected. Zeesen and Daventry schedules are liable to monthly change, while their programmes may also be transferred to alternative transmitters.

Newcomers to Shortwave listening may be disappointed at being unable to tune in all stations when they are on the air. Many things govern Shortwave reception and what may be audible in one location may not be in another. Again a station heard at good strength one day may not be audible at the same time the next, even though it be broadcasting as usual.

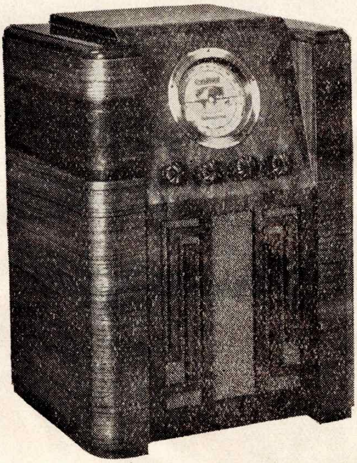
Generally speaking stations on frequencies lower than 9 megacycles will not be heard well in daylight, while stations on frequencies higher than 12 megacycles will not be received well at night. This applies more particularly to low-powered stations, but not so much to the powerful Empire and Colonial transmitters in England, France, Germany and Italy which use effective directional aerials.

Tuning on the Shortwave is vastly different from tuning on the Broadcast Band. Much practice is required before a newcomer can hope to tune in all stations regularly heard by experienced listeners. Do not forget also, the regular broadcasting stations are located at widely separated points, e. g., 6, 9.5, 11.8 and 15.2 megacycles—and above all TUNE SLOWLY. Do not pass over weak carriers, as these may frequently by careful tuning be brought up to readable strength.

The times quoted in these schedules are N.Z. Standard Time and according to the 24 hour clock, e. g., 5.30 p.m. is described as 17.30, whereas 5.30 a.m. is simply 5.30.

CALL	LOCATION	Metres	Megacycles	Watts	Schedule
YDA4	Soekaboemi, Java	193.55	1.550	25	10.15-11.15, 15-18, 22-3.30
YDB6	Malang, Java	191.08	1.570	100	10.15-11.15, 15-18, 22-3.30
YDD3	Batavia, Java	189.27	1.585	50	
YDB5	Solo, Java	188.09	1.595	25	10.15-11.15, 15-18, 22-3.30
YDB4	Tjepoe, Java	185.76	1.615	25	10.15-11.15, 15-18, 22-3.30
YDD2	Bandoeng, Java	184.05	1.630		
YDA3	Buitenzorg, Java	182.92	1.640	25	10.15-11.15, 15-18, 22-3.30
YDB3	Djokjakarta, Java	180.72	1.660	100	10.15-11.15, 15-18, 22-3.30
YDJ4	Cheribon, Java	163.04	1.840		21-3
YDK6	Semarang, Java	161.29	1.860		Mon. 22-2
YDO9	Soerabaja, Java	159.57	1.880		
YDG6	Batavia, Java	157.89	1.900		21-3
YDH9	Buitenzorg, Java	156.25	1.920		21-3
YDN3	Kediri, Java	154.64	1.940		
YDH8	Bandoeng, Java	153.06	1.960		
YDO8	Soerabaja, Java	151.52	1.980		21-22
YDO7	Soerabaja, Java	144.93	2.070		21-24
YDG5	Batavia, Java	143.54	2.090		23-1.30, Native music
YDI2	Soekaboemi, Java	142.18	2.110		21-3
YDA2	Batavia, Java	125.87	2.385	150	10.15-11.15, 15-18, 22-3.30
YDE4	Soerabaja, Java	124.22	2.415	75	Native music only
YDB2	Semarang, Java	122.45	2.450	150	10.15-11.15, 15-18, 22-3.30
YDK5	Semarang, Java	110.70	2.710		Mon. 22-2
YDO4	Soerabaja, Java	109.89	2.730		13-14, 22-24, ex. Sun.
YDE5	Djokjakarta, Java	109.09	2.750	25	Native music only
YDL6	Djokjakarta, Java	109.09	2.750		
YDO6	Soerabaja, Java	108.30	2.770		
YDN2	Madioen, Java	107.53	2.790		
YDQ6	Malang, Java	106.76	2.810		
YDU4	Medan, Sumatra	106.00	2.830		
YDG4	Batavia, Java	105.26	2.850		
YDJ3	Tegal, Java	104.53	2.870		
YDJ2	Pekalongan, Java	103.81	2.890		
YDE3	Semarang, Java	103.09	2.910	15	Native music only
YDK3	Semarang, Java	103.09	2.910		
YDO5	Soerabaja, Java	102.39	2.930		Mon., Tu., Sat., 21-23.30
YDQ5	Malang, Java	101.69	2.950		
YDA	Tandjongpriok, Java	98.68	3.040	10000	15-18, 22-3.30
YDH6	Bandoeng, Java	95.85	3.130		
YDG3	Batavia, Java	95.25	3.150		Tu., Th., Sat., 21-23

CALL	LOCATION	Metres	Megacycles	Watts	Schedule
YDK2	Semarang, Java	94.04	3.190		
YDL5	Djokjakarta, Java	93.46	3.210		22.30-23, ex. Sun.
YDQ4	Malang, Java	92.88	3.230		
YDH5	Garoet, Java	92.31	3.250		
YDK4	Magelang, Java	91.74	3.270		
YDO3	Soerabaja, Java	91.19	3.290		21-23
YDH4	Bandoeng, Java	90.69	3.310		
YDM2	Tjepoe, Java	90.36	3.320		21-2
YDV2	Bandjermasin, Bor.	90.09	3.330		
YDQ3	Malang, Java	89.55	3.350		Sun., 15-17.30, 23-1; Mon. Wed., Th., 16.30-17.30; Tu., 16.30-17.30, 23-1; Fri., Sat., 16.30-17, 23-1
YDQ2	Djember, Java	88.50	3.390		21-22.30, Sun. to 23
YDL4	Djokjakarta, Java	87.98	3.410		22-2, ex. Sun.
YDO2	Soerabaja, Java	87.46	3.430		21-3
YDL3	Solo, Java	86.96	3.450		
YDG2	Batavia, Java	86.46	3.470	450	21-3
YDH3	Bandoeng, Java	85.96	3.490	200	20.45-22.30, ex. Sun.; Sun. 13.30-14.45, 21.30-22.30
HB9B	Basle, Switzerland	85.00	3.530	50	8.30-9
CR7AA	Lourenco Marques, Mozambique	84.67	3.543	150	Tu., Fri., Sun., 6-8
CT2AJ	Ponta Delgada, Azores	75.00	4.000	50	Th., Sun., 9.30-11.30
HCJB	Quito, Ecuador	73.00	4.107	500	11.15-14.15, ex. Tu.
RW15	Khabarovsk, USSR	70.20	4.273	20000	19.30-0.30
YNOP	Managua, Nicarag.	70.09	4.280	20	
YDB	Soerabaja, Java	67.11	4.470	1000	10.15-11.15, 15-18, 22-3.30
HC2ET	Guayaquil, Ecuad.	65.22	4.600	300	Th., Sun., 2-4.30, 14-15.15
YDU2	Medan, Sumatra	65.22	4.600		



Model II
7 Valve DUAL WAVE
SUPERHETRODYNE
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RADIO

"KNOWN FOR TONE"

TURNBULL & JONES LTD.
AUCKLAND WELLINGTON CHRISTCHURCH DUNEDIN

CALL	LOCATION	Metres	Megacycles	Watts	Schedule
CT3AQ	Funchal, Madeira	65.02	4.615	50	Wed., Fri., 9.30-11; Mon., 3-5.30
YDE2	Solo, Java	62.37	4.810	100	Native music only
YDL2	Solo, Java	62.37	4.810	150	23-3
HJ5ABC	Cali, Colombia	58.82	5.100	30	Mon. 4.30-5.30; Wed., Sat. 12.30-14.30
PMY	Bandoeng, Java	58.37	5.140	600	21-2; Fri., Sat. to 3
OK1MPT	Prague, Czecho	58.31	5.145		Experimental station
YDU3	Medan, Sumatra	57.03	5.260		
HAT	Budapest, Hungary	55.56	5.400	20000	Mon. 12.30-13.30
HJ5ABB	Cali, Colombia	54.64	5.490		8-14
CP9	Oruro, Bolivia	54.05	5.550	200	6.30-7.30
HI1J	Santo Domingo, D.R.	51.90	5.780		10.30-14
OAX4D	Lima, Peru	51.90	5.780	20000	Th., Sun. 13.30-16
HCK	Quito, Ecuador	51.81	5.790		4-5, 12.30-14.45 ex. Mon.
TIXGP3	San Jose, C.R.	51.46	5.830		12.30-15.30
YV5RMO	Maracaibo, Ven.	51.25	5.850	200	9.45-14, ex. Mon.
HJ2ABC	Cucuta, Colomb.	51.11	5.870	50	3.30-4.30, 11-13.30
YV8RB	Barquisimeto, Ven.	51.02	5.880		
HJ1ABJ	Santa Marta, Col.	50.51	5.940		11.30-13.30
TGX	Guatemala City, Gu.	50.51	5.940	100	0.30-2.30, 5.30-7, 12.30-16.30, ex. Mon.
HJ4ABE	Medellin, Colom.	50.42	5.950	3000	Tu., Th., Sat. 11.30-15.30; Wed., Fri., Sun. 11-14.30
YNLF	Managua, Nicarag.	50.42	5.950	250	11.30-13.30
HVJ	Vatican City	50.26	5.969	12000	6.30-7.00, Sun. also 21.30-22.30
HIX	Santo Domingo, D.R.	50.17	5.980	200	Wed., Sat. 12.40-14.40
HJ3ABH	Bogota, Colombia	50.17	5.980	1600	11.30-14.30
XECW	Mexico City, Mex.	50.17	5.980	10	12.30-15.30
RW59	Moscow, U.S.S.R.	50.00	6.000	20000	7.30-10.30
ZEC	Salisbury, Rhodesia	50.00	6.000	2000	Sun. 16.30-17.30
	St. Denis, Reunion	50.00	6.000	90	20.45-21.15; Wed., Fri., Sun. also 1-2.30
	Tananarive, Madagascar	50.00	6.000	500	Tu. 19.30-20.15; Wed. Fri. Sat. 2.30-3.30, 19.30-20.15; Th. 2.30-4, 19.30-20.15; Sun. 2.30-4, 19-20.30
VE9DN	Drummondville, Q	49.96	6.005	500	Wed. 5.45-7.45
COC	Havana, Cuba	49.92	6.010	5000	2.00-3.30, 8.30-10.30, 12.30-13.30, Sun. also 15-17
XEBT	Mexico City, Mex.	49.92	6.010	5000	11.30-17.30
ZHI	Singapore, F.M.S.	49.90	6.012	90	Mon., Wed., Th. 22.30-1; Sun., 15.10-17.40, 22.10-23.30
DJC	Zeesen, Germany	49.83	6.020	5000	4.30-9, 10-15
CQN	Macao, Port. China	49.81	6.025	500	Mon., Wed., Fri. 19.30-21.30
HP5B	Panama City, Pan.	49.75	6.030	500	4.30-5.30, 11.30-15
W1XAL	Boston, Mass.	49.67	6.040	5000	Relays WEEI Mon., Wed., Fri. 12-14
W4XB	Miami, Fla.	49.67	6.040	2500	Relays WIOD 7.30-15.30
YDA	Tandjongpriok, Java	49.67	6.040	10000	15-18, 22-3.30
HJ1ABG	Barranquilla, Col.	49.65	6.042	150	4.30-5.30, 11-14.30 ex. Mon.
GSA	Daventry, England	49.59	6.050	20000	10.30-12.30
OXY	Skamlebaek, Den.	49.50	6.060	500	5.30-11.30; Mon. 3.30-11.30
PRA8	Pernambuco, Brazil	49.50	6.060		9-13

CALL	LOCATION	Metres	Megacycles	Watts	Schedule
VQ7LO	Nairobi, Kenya	49.50	6.060	600	3.30-6.30; Mon., Wed., Fri. also 22.15-22.45; Tu. also 18.30-20.30; Fr. also 0.30-1.30; Sun. also 6.30-7.30
W3XAU	Philadelpia, Pa.	49.50	6.060	1000	12.30-3.30
W8XAL	Cincinnati, Ohio	49.50	6.060	10000	15.30-17.30, 23-12.30
HJ1ABF	Barranquilla, Col.	49.42	6.070	25	
VE9CS	Vancouver, B.C.	49.42	6.070	7	10.30-12, Tu. also 16-18; Sun. 6.15-13.30, 15-17.30
OER2	Vienna, Austria	49.41	6.072	250	1.30-9.30
ZHJ	Penang, F.M.S.	49.41	6.072		Tu., Th., Sun. 23.30-1.30; Wed., Fri. 19.30-20
HJN	Bogota, Colombia	49.35	6.079	1000	4.30-6, 10.30-15.30, ex. M.
CP5	La Paz, Bolivia	49.34	6.080	1000	12.15-13.45
DJM	Zeesen, Germany	49.34	6.080	5000	
VE9HX	Halifax, N.S.	49.34	6.080	200	2-5.30, 9.30-15.30
W9XAA	Chicago, Ill.	49.34	6.080	500	Mon. 4-13.30; Wed., Fri., Sun. 8.30-16.30; Tu., Th., Sat. 9-11.30
2RO	Rome, Italy	49.30	6.085	20000	Tu., Th., Sat. 10.30-12.00
HJ4ABC	Pereira, Colom.	49.26	6.090	50	13-14
VE9BJ	St. John, N.B.	49.26	6.090	100	11.30-13
VE9GW	Bowmanville, Ont.	49.26	6.090	500	Mon. 5.30-13.30; Tu., Wed., Th., 7.30-16.30; Th., Fri., Sat. 23.30-16.30
ZTJ	Johannesburg, S.A.	49.20	6.098	5000	Mon. 0.30-2.45, 5-7.30, 16.15-17, 20-23.30; Tu., to Sat. 1.30-8.30, 16.15-17, 20-23.30; Sat. also, 8.30-9.30; Sun. 1.30-9.30
HJ1ABC	Quibdo, Colombia	49.18	6.100	10	Sun, 15.30-16
HJ4ABL	Manizales, Col.	49.18	6.100		
W3XAL	Boundbrook, N.J.	49.18	6.100	20000	Tu., Th., Sun. 10-17.30
W9XF	Chicago, Ill.	49.18	6.100	10000	9-12.30, 14-18.30, ex. Sun., Mon.
GSL	Daventry, England	49.10	6.110	20000	Mon., Wed., Fri., Sun., 14-15
VUC	Calcutta, India	49.10	6.110	500	1.36-4.06, ex. Mon.; Mon. 2.06-3.06; Sun. also 16.36-19.06
HJ4ABG	Medellin, Colom.	49.10	6.110	10	
YV2RC	Caracas, Venez.	49.08	6.112	200	Relays YV1RC 3.30-5.30, 10-14; Mon. 1.30-5.30, 6.45-8, 11-15
HJ1ABE	Cartagena, Col.	49.05	6.115	250	3.30-4.30, Mon. 1.30-4.30; Tu. also 14.30-16.30; Th. also 12.30-14.30
W2XE	Wayne, N.J.	49.02	6.120	5000	Relays WABC 10.30-15.30
YDA	Bandoeng, Java	49.02	6.120	1500	10.15-11.15, 15-18, 22-3.30
HJ4ABN	Manizales, Col.	49.00	6.123		
YV11RMO	Maracaibo, V.	48.95	6.128		Irregular
LCL	Jeloy, Norway	48.94	6.130	1000	2.30-10.30
ZGE	Kuala Lampur, F.M.S.	48.92	6.133	180	Tu., Fri., Sun. 23.10-1.10
W8XK	Pittsburg, Penn.	48.86	6.140	40000	9-17.30
ZTD	Durban, S.A.	48.82	6.145	10	
CJRO	Winnipeg, Manitoba	48.82	6.145	2000	12.30-15.30, 16-16.30
CSL	Lisbon, Portugal	48.78	6.150	500	6.30-10.30, 23.30-1
HJ2ABA	Tunja, Colombia	48.78	6.150	250	12.30-14.30
YV3RC	Caracas, Venez.	48.78	6.150	1000	3-6, 9-14.20; Mon. 1.30-5.30, 6.45-8, 12-14
CO9GC	Santiago de Cuba.	48.78	6.150	40	1.30-2.30, 4-6.30, 7.30-9, 13.30-14.30

CALL	LOCATION	Metres	Megacycles	Watts	Schedule
HJ3ABF	Bogota, Colombia	48.62	6.170	50	11.30-15.30, ex. Mon.
CT1GO	Parede, Portugal	48.40	6.198	350	Mon. 4-5.30, 11.50-13.00; Wed., Th., Fri., Sat. 11.50-13
HJ1ABN	Cienaga, Colom.	48.00	6.250		13-14, Mon. also 6-7
OAX4B	Lima, Peru	48.00	6.250	200	12-14.30
HI1A	Santo Domingo, D.R.	48.00	6.250	50	12.10-14.10, ex. Mon.
HIZ	Santo Domingo, D.R.	47.50	6.316	150	15.30-17, ex. Mon.
JZG	Nazaki, Japan	47.39	6.330	10000	20.30-0.30, irregularly
HJ1ABH	Barranquilla, Colombia	47.24	6.350		
YV4RC	Caracas, Venez.	47.06	6.375	1000	4-5, 9-14.30, Sun. 3-5
HC1MAR	Ambato, Ecua.	47.00	6.386		Th. 12.30-14.30
LU8AB	Buenos Aires, Arg.	46.88	6.400		
YN1GG	Managua, Nicarag.	46.88	6.400	150	5.30-7, 11.30-13.30
CO2JB	Cienfuegos, Cuba	46.90	6.417		
VE9AS	Fredericton, N.B.	46.69	6.425		Relays CFNB 8.30-13.30, irregularly
W3XL	Boundbrook, N.J.	46.69	6.425	25000	Experimental
HJ1ABB	Barranquilla, Colombia	46.53	6.447	300	4-5.30, 10.30-14.30
HI4D	Santo Domingo, D.R.	46.28	6.482	45	5.25-6.10, 9.10-12.10, ex. Mon.
HJ5ABD	Cali, Colombia	46.22	6.490	100	11.30-14.30, ex. Mon.
HIL	Santo Domingo, D.R.	46.02	6.518		Sun. 12.10-14.10
YV6RV	Valencia, Venez.	46.01	6.520	1000	9-14
TI4NRH	Heredia, Costa R.	45.50	6.590		
RW72	Moscow, U.S.S.R.	45.38	6.611	10000	1.30-3.45, 4-6.30
PRADO	Riobamba, Ecua.	45.31	6.618	2000	Fri. 13.30-16
HC2RL	Guayaquil, Ecua.	45.05	6.667	150	Mon. 10.15-12.30; Wed. 13.45-15.45
TIEP	San Jose, Costa Rica	44.71	6.710	200	11.30-14.30, ex. Mon.
JVT	Nazaki, Japan	44.44	6.750	20000	20.30-0.30, irregularly
HC1JW	Quito, Ecuador	44.05	6.810	300	Irregular
OA4B	Lima, Peru	44.05	6.810		
HIH	San Pedro de Macoris.	44.03	6.814		Mon., Fri. 8.10-10.10, 12.40-14.40
HJ5ABE	Cali, Colombia	42.86	7.000	50	
HJ5ABG	Cali, Colombia	42.86	7.000	15	
VK3ZX	Melbourne, Vic.	42.83	7.005	25	Sun. 17-18.30
HRP1	San Pedro Sula, Honduras	42.60	7.040		
HKE	Bogota, Colombia	42.25	7.100	140	Tu., Fri. 10.30-13.30; Wed., Sun. 12.30-13.30
	Sincelejo, Colombia	42.25	7.100		
HB9B	Basle, Switzerland	42.14	7.120	50	8.30-9
CR6AA	Lobito, Angola	41.78	7.177	500	Th., Sun. 7-9
HJ4ABB	Manizales, Col.	41.67	7.200	300	4.45-5.30; Tu., Fri., also 12-14.30; Mon. also 7-9.30
HJ1ABD	Cartagena, Col.	41.20	7.280	75	12.30-14.30
VS1AM	Johore, Malaya	40.68	7.375	500	
EA8AB	Santa Cruz de Tenerife	40.60	7.390	200	Wed., Fri., Sun. 10.30-11.30
HJ3ABD	Bogata, Colom.	40.54	7.400		11.30-15.30, Tu., Th., Sat. also 10.30-11.30
YNE	Puerto Cabezas, Nicaragua	40.54	7.400	50	
XGOY	Yunnan, China	40.00	7.500	250	18.30-19.30
JVP	Nazaki, Japan	39.95	7.510	20000	20.30-0.30, irregularly
HBP	Prangins, Switzerland	38.47	7.799	18000	Sun. 10-10.45

CALL	LOCATION	Metres	Megacycles	Watts	Schedule
HC2JSB	Guayaquil, Ecua.	38.19	7.855	50	3.50-6.20, 11.50-15.50
HC1PM	Quito, Ecuador	37.50	8.000	12	Tu. 12.30-15.30
IRF	Rome, Italy	37.41	8.020	20000	Experimental
CNR	Rabat, Morocco	37.33	8.035	10000	Mon. 7.30-10
HJ5ABF	Popayan, Col.	36.59	8.200	50	
TFK	Reykjavik, Iceland	33.15	9.050		
CP6	La Paz, Bolivia	32.89	9.120	1000	Relays CP4 Irregularly
CE32	Los Andes, Chile	32.00	9.375	50	
PLV	Bandoeng, Java	31.86	9.415	80000	Irregular
COH	Havana, Cuba	31.80	9.428	150	2.30-3.30, 9.30-10.30, 12.30-13.30
PRF5	Rio de Janeiro, Bra.	31.58	9.500	60000	10-10.45
GSB	Daventry, England	31.55	9.510	20000	1.45-5.15; 5.30-10.15; 17.45-19.45
VK3ME	Melbourne, Vic.	31.55	9.510	3000	Wed., Th., Fri. 21.30-23; Sat. 21.30-23.30
W2XAF	Schenectady, N.Y.	31.48	9.530	40000	Relays WGY 12-15.30
DJN	Zeesen, Germany	31.45	9.540	5000	0.30-4, 9.45-15, 20.15-23.45
LKJ1	Jeloy, Norway	31.45	9.540	1000	21.30-0.30
DJA	Zeesen, Germany	31.38	9.560	5000	0.30-4, 9.45-13.45
VUB	Bombay, India	31.36	9.565	6000	Th., Sun., 3.30-5
KZRM	Manila, P.I.	31.35	9.570	6000	Irregular
W1XK	Millis, Mass.	31.35	9.570	5000	Relays WBZ 23.30-17.30
GSC	Daventry, England	31.32	9.580	20000	8.30-10.15; 10.30-12.30; Mon., Wed., Fri., Sun., also 14-15
VK3XX	Lyndhurst, Vic.	31.32	9.580	600	P.O. Experimental Station
3LR	Lyndhurst, Vic.	31.32	9.580	600	19.45-24, ex. Sun.
HP5J	Panama City, Pan.	31.28	9.590		Tu. 12-13
VK2ME	Sydney, N.S.W.	31.28	9.590	12000	Sun. 17.30-19.30, 21.30-3.30
W3XAU	Philadelphia, Pa	31.28	9.590	1000	4.30-12.20
HBL	Prangins, Switzerland	31.27	9.595	18000	Sun. 10-10.45
CT1AA	Lisbon, Portugal	31.25	9.600	2000	Wed., Fri., Sun. 9-11.30
CT1CT	Lisbon, Portugal	31.00	9.677	500	Sun. 23.30-1.30, Fri. 8.30-10.30
ZEB	Bulawayo, Sth. Rhod.	31.00	9.677	500	Wed. 5.45-7.45
2RO	Rome, Italy	30.67	9.780	20000	7-9.30; Tu., Th., Sat. also 12.15-13.45
EAQ	Madrid, Spain	30.43	9.860	20000	9.45-11.30; Sun. also 5.30-7.30
ORK	Ruysselede, Belgium	29.04	10.332	8000	6.15-7.45
LSX	Buenos Aires, Arg.	28.98	10.350	20000	Relays LR4 7.30-8.30, 12.30-13.30 and irregular
DIQ	Konigswusterhausen, Germany	29.15	10.290		Experimental
JVN	Nazaki, Japan	28.14	10.660	20000	20.30-0.30, irregularly
JVM	Nazaki, Japan	27.93	10.740	20000	20.30-0.30, irregularly
CJRX	Winnipeg, Manitoba	25.60	11.720	2000	12.30-15.30, 16-16.30
FYA	Paris, France	25.60	11.720	12000	11.30-14.30, 15.30-17.30
PHI	Huizen, Holland	25.57	11.730	23000	Summer months 0.30-2.40, ex. Wed., Th.; Sun. to 3.10; Mon. to 3.40
GSD	Daventry, England	25.53	11.750	20000	5.30-8.30; 17.45-19.45
DJD	Zeesen, Germany	25.49	11.770	5000	4.30-9
W1XAL	Boston, Mass.	25.45	11.790	5000	Relays WEEI Irregularly
DJO	Zeesen, Germany	25.43	11.795	5000	
2RO	Rome, Italy	25.40	11.810	9000	
W2XE	Wayne, N.J.	25.36	11.830	5000	Relays WABC 7.30-9.30
DJP	Zeesen, Germany	25.31	11.855	5000	
GSE	Daventry, England	25.28	11.860	20000	22.30-1.30; Mon. 0-1.30

CALL	LOCATION	Metres	Megacycles	Watts	Schedule
W8XK	Pittsburgh, Pa.	25.27	11.870	40000	9-14.30, Sun. until 17.30
FYA	Paris, France	25.23	11.880	12000	3.45-6.45, 7.30-10.30
RNE	Moscow, U.S.S.R.	25.00	12.000	20000	Sun. 14.30-15.30, 22.30-23.30; Mon. 2.30-3.30
CT1CT	Lisbon, Portugal	24.83	12.082	500	Mon. 1.30-3.30; Fri. 7.30-8.30
CT1GO	Parede, Portugal	24.20	12.396	350	Mon.. 2.30-4; Wed., Fri., Sat. 5.30-6.45
CNR	Rabat, Morocco	23.38	12.830	10000	Mon. 0-2
VPD	Suva, Fiji	22.94	13.075	2000	17-18, ex. Sun.
TIEP	San Jose, C.R.	22.36	13.415	200	Mon. 5.30-8.30
RKI	Moscow, U.S.S.R.	19.94	15.040		Sun. 22.30-23.30; Mon. 2.30-3.30 and Irregular
HVJ	Vatican City	19.84	15.121	12000	3-3.15
GSF	Daventry, England	19.82	15.140	15000	22.30-1.30; Mon., 0-1.30
DJB	Zeesen, Germany	19.73	15.200	5000	17-18.30; 20.15-23.45
W8XK	Pittsburgh, Pa.	19.72	15.210	40000	2.30-8.45
PCJ	Eindhoven, Holland	19.71	15.220	18000	Relays PHI Mon. 0.30-3.10
FYA	Paris, France	19.68	15.243	12000	23.30-3.30
W1XAL	Boston, Mass.	19.67	15.250	5000	Relays WEEI Irregularly
GSI	Daventry, England	19.66	15.260	15000	
W2XE	Wayne, N.J.	19.64	15.270	5000	Relays WABC 3.30-5.30
DJQ	Zeesen, Germany	19.63	15.280	5000	17-18.30
CP7	La Paz, Bolivia	19.60	15.300	1000	Relays CP4 Irregularly
DJR	Zeesen, Germany	19.55	15.340	5000	
W2XAD	Schenectady, N.Y.	19.56	15.330	20000	Relays WGY 7-8
HAS3	Budapest, Hungary	19.52	15.370	20000	Mon. 0.30-1.30
PRADO	Riobamba, Ecuad.	19.47	15.410	2000	Mon. 9-10.30 (Winter only)
W3XL	Boundbrook, N.J.	17.33	17.310	25000	Sat. 3.30-9.30
PHI	Huizen, Holland	16.88	17.775	60000	Winter months 0.30-2.40, ex. Wed., Th.; Sun. to 3.10; Mon. to 3.40
W3XAL	Boundbrook, N.J.	16.87	17.780	15000	2.30-8.30, ex. Fri.
GSG	Daventry, England	16.86	17.790	15000	
GSH	Daventry, England	13.97	21.470	15000	
GSJ	Daventry, England	13.94	21.530	15000	
W8XK	Pittsburgh, Pa.	13.93	21.540	40000	23.30-6.30
GSK	Daventry, England	11.49	26.100	15000	

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Additions, Cancellations, and Alterations to the complete list published in 1934 "Radio Calls."

ADDITIONS . . .

NEW SOUTH WALES

2AX—H. Kerr, 21 Pittwater Rd., Manly
2BB—Eastwood Radio Club (L. W. Cocks Hon. Sec.), 199a Rowe St., Eastwood
2BN—H. L. Russack, 32 Park Rd., Hurstville
2BO—A. E. Barlow, 21 Ewart St., Marrickville
2BS—W. G. Smith, 5A Cliff St., Manly
2BW—A. S. Moye, 1 Roma St., Wagga
2CL—Creela Radio Products, 187 William St., Darlinghurst, Sydney
2CV—R. J. Ferrie, 30 Edward St., Woollahra
2CW—W. Pearse, 30 High St., Cessnock
2CZ—Australian N.Z. Amusement Co., 166 Castlereagh St., Sydney
2DD—D. Dawson, 307 Marius St., Tamworth
2DP—M. Webb, 457 King St., Newton
2DT—A. R. Harrison, 49 Harrow Rd., Stanmore
2EJ—G. H. Branson, 243A Botany Rd., Mascot
2EW—W. Webster, 128 Pittwater Rd., Gladesville
2EX—A. H. Outtrim, Windsor St., Richmond
2FF—F. L. Cook, "Minore," Pittwater Rd., Dee Why
2FG—E. C. Medhurst, 410 Illawarra Rd., Marrickville
2GG—J. Gue, 33 Edmund St., Waverley
2GP—G. J. W. Partridge, 1 Llewellyn St., Marrickville
2HJ—A. A. Mackenzie, C/o H. C. Carter, Yarraman Nth. Station, Quirindi
2IB—A. L. Sproule, 15 Short St., Dubbo
2IX—B. H. Green, 2 Osborne Rd., Manly
2JC—J. H. Wall, River St., Macksville
2JE—N. P. Morse, 48 Kareela Rd., Cremorne
2KF—C. J. Field, 29 Leichhardt St., Katoomba
2KS—L. S. Meyers, 23 Church St., Marrickville
2LA—L. K. Adams, 37 McClelland St, Willoughby
2LC—N. Glasscock, 9 McMahon St., Willoughby
2LW—E. V. Maddison, 126 Alison Rd., Randwick
2MK—L. Elphinstone, Cr. Wrixham and Main Rd., Thirroul
2MP—Rev. M. H. Winkler, 196 Edwards St., South Wagga
2NF—J. Musgrave, Post Office, Werris Creek
2NQ—N. S. Pieremont, "Rosenhill," Nicholson Parade, Cronulla
2NU—D. B. Knock, 14 Yanko Avenue, Waverley
2NZ—G. McD. Morrison, Iluka Rd., Mosman
2OX—G. E. Barnes, 110 Dawson St., Lismore
2OY—M. H. Harrison, 168 Paddington St., Sydney
2PG—R. Gosnell, 232 Alt St. Haberfield
2SN—S. S. Nelson, 7 Gould Ave., Petersham
2SV—C. W. Peters, 26 Chelmsford Ave., Linfield
2TG—A. T. Goldie, 18 Kintore St. Dulwich Hill
2TL—T. W. Watson, 70 Calero St., Lithgow
2TN—I. Bailue, "Osborne," Albert St., Randwick
2TT—T. A. Todd, "Loloma," Vimiera Rd., Eastwood
2TZ—A. A. Sinfield, 73 Peters St., Wagga
2UB—G. C. Bastow, 338 Victoria St., Darlinghurst
2UC—K. A. Maloney, 6 Richard St., Marrickville
2UM—G. C. Colton, 97 Clarendon Rd., Stanmore
2UQ—P. J. Manley, "Altona," Petrach Ave., Vaucluse
2VP—G. W. Morris, "Monaro," Reserve Rd., Artarmon
2WM—W. L. Piggott, 45 The Promenade, Sans Souci, Kogarah
2WW—W. R. C. Nash, 255 West St., Crows Nest
2XS—B. C. Gillanders, 62 Bellevue Rd., Bellevue Hill, Sydney
2XX—B. Dale, 8 Gladstone St., Kogarah
2YA—R. C. Black, 21 Harrow Rd., Auburn
2YE—J. A. Davey, 23 Avenue Rd., Glebe Point
2YF—F. D. Caldwell, 31 Francis St., Bondi
2ZJ—H. M. Temby, 321 William St., Broken Hill

VICTORIA

3AC—H. G. Chandler, 43 French St., Hamilton
3AT—A. F. Taylor, 4 The Ridgeway, Ivanhoe N.21
3BB—W. F. Brown, 16 Hunter St., Hawthorn E.2
3BS—A. B. Splatt, Rattray St., Greensborough
3CY—A. A. Burman, 28 Balloan St., West Coburg N.13
3DD—M. J. Swaby, 35 Glenferrie Rd., Glenferrie E.2
3ET—H. J. Asmus, 153 Buckley St., Footscray W.11
3FH—Melbourne High School Amateur Radio Club, Forrest Hill, South Yarra S.E.1
3FW—W. A. Fulton, 24 Logan St. Canterbury E.7
3HE—H. G. Hodge, 13 Albert St., Surrey Hills E. 10
3KH—E. W. A. Anderson, 9 Clark St., Glen Iris S.E.6
3KS—A. C. Cannon, Victoria St. Cobden
3LG—J. G. Mason, 236 Barkers Rd. Hawthorn E.2
3MW—S. G. White, 121 Drummond St., Carlton N.3
3NA—J. K. Gardner, Ormond College, Carlton N.3
3OU—J. O. Williams, 39 Morang Rd., Hawthorn E.2
3PL—J. F. Colthrup, 139 Spensley St., Clifton Hill N.8
3RU—G. J. Wright, 26 Kelvin Grove, Prahran S.1
3RZ—J. R. Clarke, 380 Auburn Rd., Auburn E.2
3SN—J. B. Bell. 139 Skene St., Shepparton
3SP—S. P. Coath, 6 Symon St., West Preston N.18
3TL—R. E. Trebilcock. Victoria St., Kerang
3WM—W. M. Wilson, 131 Wood St., East Preston N.18
3WW—W. L. Matters, 40 Hyland St., Warrnambool
3XB—I Stafford, State School, Manya Nth. via Panitya
3XD—R. Dowling, 95A Clausen St., North Fitzroy N.7
3XM—W. L. Jackson, 23 Malane St., Ormond S.E.9
3YD—C. W. Sumsion, 36 Warrigul Rd., Oakleigh S.E.12
3YP—C. I. Paterson, 82 Burke Rd., East Malvern S.E.5

QUEENSLAND

4AJ—A. C. Allison, "Arma," Warraba Ave. Chermside
4AP—A. Guildford, 36 Bramston Terrace, Helston
4BL—Bundaberg Radio Listeners' League, 7 Burrum St., Bundaberg
4CA—A. H. Caswell, Fryar St., Murgon
4DB—G. D. Brown, Bale St., Ascot
4EC—E. W. Cagney, Bracker St., Rockhampton
4ER—E. H. Reilly, Ryan St., Hill End, South Brisbane
4HA—H. B. Angel, Sisley St., St. Lucia
4JC—J. H. Bailey, 18 Thomas St., Red Hill
4JK—J. L. Humphrey, Poopoonbah, Via Giru
4KP—A. W. Munro, 15 Mcllwraith St., South Townsville
4LA—S. D. P. Smith, Arthur St., Corinda, Via Brisbane
4LE—G. A. Greenhill, 39 Whynot St. West End, Brisbane
4LN—J. L. Grey, 22 Wilson St., Kangaroo Point
4ML—L. G. Merchin, Hillier St., Richmond
4MN—M. A. Nettleton, McKenzie St., Cairns
4NP—N. W. Phillips, 93 Nicholas St., Ipswich
4OL—F. P. O'Loughlin, 37 Kennedy Terrace, Red Hill
4PJ—P. F. Jessop, Hambledon, Via Cairns
4WA—W. J. Goldsworthy, 27 Brunswick St., Valley
4XU—M. C. Laurie-Rhodes, 7 Burrum St., Bundaberg
4XW— G. Harmer, Aston St., Cooparoo
4ZY—C. E. J. Burns, Knight St., Kingaroy

SOUTH AUSTRALIA

5DB—L. D. Berry, 257 Melbourne St., North Adelaide
5FA—F. B. Anderson, 25 Invergowrie Ave., Highgate
5FR—Fullarton Radio Club, 19 Fisher St., Fullarton Estate
5GP—R. G. Pitts, 65 Carlton Parade, Torrensville
5HR—W. L. Heinrich, Section 145, Hundred of Wiltunga, County of Daly
5JB—J. T. Bergin, 11 Sefton St., Largs Bay
5JR—J. A. Smith, 19 Flora St., St. Peters
5KY—J. W. Stapleton, Sturt St. Victor Harbour
5LF—L. F. Sawford, 107 Wills St., Largs
5LY—C. W. Hodder, 72 Porter St., Parkside
5PH—P. C. Hutchins, 68 Murray St., Gawler
5PN—W. L. Pearn, 23 Freeling Cres., Colonel Light Gardens
5WK—A. E. Prince, 175 North Terrace, Adelaide
5XA—H. K. Stacey, 55 Gwynne St., Firle
5ZX—A. H. Heath, 7 Clifford St., Prospect Park

WEST AUSTRALIA

6AK—University of W.A., Perth
6DS—D. D. Spencer, 24 John St., Cottesloe
6HC—Hermes Amateur Radio Club, Drill Hall, Leederville
6JE—C. R. Elsbury, 50 Addis St., Kalgoorlie
6JW—J. H. Wilmott, 6 Gardner St., Como
6KC—Katanning Amateur Radio Club, Richardson St., Katanning

TASMANIA

7AB—D. H. Fisher, 2 Claremont Launceston
7LR—A. J. R. Manning, 88 Wenvoe St. Devonport
7XL—G. W. Groves, Bluff Tea Gardens, Devonport

CANCELLATIONS . . .

2CJ—C. J. Callaby, 26 Flavelle St., Concord.
2DH—D. Hutton, Main Rd., Abermain.
2DI—D. D. Innes, 34 Eglington Rd., Glebe Point
2GX—K. D. Allen, "Moira," Moira Ave., West Ryde.
2HH—H. H. Davis, 11 Torrington Rd., Strathfield.

ALTERATIONS . . .

NEW SOUTH WALES

2AQ—J. Duffy, 1 Wilfield Ave., Rose Bay
2AS—A. C. Freeman, 51 Park Rd., Burdon
2AU—J. P. Cureton, 30 Church St., Burwood
2AV—A. W. Thurstan, 40 Arcadia St., Penhurst
2BJ—J. K. Burnett, 4 Park Ave., Chatswood
2DH—D. St. J. P. Soraghan, 2 Spencer St., Rose Bay
2DZ—J. Clark, 14 Maranui Ave., Dee Why
2EL—E. L. Colyer, 9 Wentworth Rd., Vaucluse
2EO—D. H. B. Duff, 29 Cavendish St., Enmore
2FK—K. P. C. Welzel, 42 Arden St., Clovelly
2FT—F. C. Tregurtha, 193 Paddington St., Paddington
2FW—G. H. Martin, 224 Cowper St., Waverley
2FX—F. J. Cross, 45 Gloucester St., Rockdale
2GU—W. L. Penny, C/o Tamworth Radio Development Co., Ltd., Tamworth
2HA—E. B. White, 221 Greenwich Rd., Greenwich Point, Sydney
2HT—H. K. R. Thomas, 65 Kurraba Rd., Neutral Bay
2IO—A. E. Barlow, 21 Ewart St., Marrickville
2IS—S. J. Laurenson, 17 Caledonian St., Bexley
2JE—F. S. Maynard, 80 Brighton St., Croydon
2KC—R. H. Fry, 91 Bradley St., Goulburn
2LD—L. H. Dodds, "Renong," Beta St., Lane Cove
2LG—J. W. Wallace, 87 Faithful St., Goulburn
2LU—E. T. Prentice, Sydney Radio Centre, Carlingford
2LV—J. Chessell, 423 New Canterbury Rd., Dulwich Hill
2MZ—Hurstville Radio Club, 9 Wellington Rd., Hurstville
2NJ—A. K. Johnson, 10 Duncan St., Punchbowl
2NO—D. B. Knock, 14 Yanco Ave., Bronte
2OL—H. L. Watson, Tallagala St., Unanderra
2PK—P. T. Hainsworth, 14 Winchcombe Ave. Haberfield
2QB—R. C. S. Radio, 21 Ivy St., Darlington
2QC—G. B. Best, "Bondo," Campbell St., Parramatta
2QO—T. C. Dale, 17 Richmond St., Cremorne
2QY—A. M. L. Moss, 26 McLeay St., Pott's Point
2SA—W. E. Salmon, "La Paloma," Frederick St., North Bondi
2SN—S. Nelson, 4 Albion St., Marrickville
2SQ—S. D. Inglis, 63 Cambridge St., Stanmore
2ST—S. E. Tatham, 160 Castlereagh St., Sydney
2SW—C. L. Southwell, 21 Narooma Rd., Northbridge
2TC—H. J. Taylor, "Bonnie Doon," Monteagle
2TW—T. R. W. Bushby, 8 Holme Flats, 528 New South Head Rd., Double Bay
2VJ—V. J. E. Jarvis, C/o S. G. Dean, 6 Nancarrow Ave., Wellington
2VM—J. K. McCarthy, 261 Burns Bay Rd., Lane Cove
2VX—J. F. Heine, 107 Francis St., Bondi
2XM—L. A. Worrall, 56 Rossmore St., Punchbowl
2XQ— R. J. Traill, C/o P. O. Box 3, Walgett
2HK—H. W. Nicolle, 3 Nunnington Ave., Ryde.
2HR—2HR Radio Club, 9 Wilfred Ave., Vaucluse
2IR—Institute of Radio Engineers (Australia), 17 Eccles Ave., Ashfield.
2JY—J. W. Young, "Yothahnee," Eastern Rd., Turramurra.
2LD—L. H. Dodds, 34 St. John's Ave., Gordon.
2MQ—W. E. McGowan, 10 Forrest St., Haberfield.
2NR—J. B. Scott, 41 Carlingford Rd., Epping.
2NZ—G. McD. Morrison, "The Manor," Iluka Rd., Mosman.
2OM—C. W. J. Carroll, 25 Leichhardt St., Leichhardt.
2ON—J. I. Jenner, 14 Fletcher's Glen, Bondi.
2OQ—A. Skene-Smith, 9 Wilfield Ave., Vaucluse.
2PG—R. Gosnell, 232 Alt St., Haberfield.
2QD—R. H. Dixon, 477 Olive St., Albury.
2RD—R. Longworth, 24 Northcote St., Naremburn.
2RF—W. R. Felton, 16 Roscoe St., Bondi.
2SH—A. Short, 130 Young St., Lambton.
2VM—F. A. Murray, 38 Clenalpine St., Mosman
2WB—W. N. Bullivant, West Wyalong.
2WZ—W. J. Zech, 84 Cambridge St., Stanmore
2ZY—H. F. Coffey, 20 Byng Rd., Maroubra.

3BC—R. B. C. Craw, 192 Page St., S.C.6.
3DY—C. A. R. Dyer, 162 Roseneath St., Clifton Hill, N.8.
3KH—E. W. Anderson, 9 Clark St., Glen Iris, S.E.6.
3MJ—J. F. Martin, 41 McKean St., North Fitzroy, N.7.
3RM—R. W. Easterbrook, Care 63 Bealiba Rd., Caulfield, S.E.8.
3SA—L. R. Simpson, 35 Queen St., Ararat.
3SC—Scotch College Radio Club, Scotch College, Hawthorn, E.2.
3TB—T. Barnes, 42 Munro St., Ascot Vale, W.2.
3UX—G. W. Steane, 2 Earle St., Mont Albert, E.10.
3WK—E. W. Soumprou, 51 Gooch St., Thornbury, N.17.
3WZ—M. Folie, 8 Havelock Rd., Hawthorn East, E.3.
3ZY—M. Ireson, Yaldwin St., Kyneton.

4NG—R. P. Jonasson, Alberton, via Yatala, South Coast Line.

5DO—D. O'Leary, 4 Hyde St., Tusmore Gardens.
5FT—J. S. Fitzmaurice, 18 St. Andrew's St., Walkerville North.
5PA—K. C. Parker, Central Lane, Port Pirie.
5RW—Westbourne Radio Club, 30 Avenue Rd., Unley Park.

6AK—University of Western Australia, Perth.
6AY—Wireless Institute of Australia (Western Australian Division, Albany Sub-Division), Macartney House, Norfolk St., Albany.
6DT—D. B. V. Treliving, 70 Broome St., Cottesloe Beach.
6GF—G. F. Milner, 544 William St., Mt. Lawley.
6RF—Fremantle Radio Club, Cr. South and Curedale Sts., Beaconsfield.
6RS—R. S. Trew, Young St., Harvey.
6VP—Victoria Park Radio Club, 12 Fremantle Rd., South Perth.
6XA—University of Western Australia (School of Engineering and Mining), Crawley.

7DM—H. P. Groom, 29 Main Rd., Moonah.
7RS—R. S. Hope, 112 King St., Sandy Bay.

2XU—G. Pollock. Marine Parade, Maroubra Bay
2XY—S. W. Maguire, 21 Keeley St., Paddington
2YS—A. Fairhall, 86 Bruce St., Cook's Hill, Newcastle
2ZR—J. C. Pinnell, 13 Bland St., Ashfield
2ZX—E. W. Lumbewe, 100 Todman Ave., Kensington

VICTORIA

3BH—C. R. Whitelaw, 39 Lorne St., W. 4
3FC—F. T. Clark, 4 Rainsford St., Elwood S. 3
3FY—North Suburban Radio Club, 248 Raglan St. Preston N. 18
3GC—G. R. Carter, Campbell St., Camperdown
3GJ—A. J. Hoy, 22 Pickles St., Pt. Melbourne S.C. 7
3GP—A. J. E. Shields, "Rheola," Manning Rd., East Malvern S.E.5
3HT—J. N. Marr, 31 Bloomfield Rd., Ascot Vale W.2
3JB—J. R. Kling, 75 Were St., Brighton S.5
3KB—A. L. H. Kissick, 85 Moreland Rd., East Coburg N.13
3KQ—G. T. Miles, 3 Yarra St., South Yarra, S.E.1
3LJ—L. J. Simmons, 9 Lorne Rd., Brahran S.1
3LF—M. K. Bunn, 170 Hotham St., Elsternwick S.4
3LM—E. L. Lee-Archer, 11 Marlborough St., Caulfield Nth. S.E.7
3ML—R. H. Cunningham, 397 High St., East Malvern. S.E.6
3OJ—R. E. Stevens, 33 Auburn Grove, Upper Hawthorn E.3
3OS—R. O. Scott, "Mt. Buninyong," Scotsburn
3OY—A. K. Quin, 12 Grace St. Camberwell E.6
3PM—G. Frew, 2 Gould St., Brighton Beach S.5
3RA—R. A. Parker, 1 Glenroy Rd., Hawthorn E.2
3RB—R. Buring, 322 Auburn Rd., Hawthorn E.2
3RL—R. L. Staff, 14 Ocean St., Hampton S.7
3RS—R. C. Shortell, 1 Pretoria St., Caulfield S.E.8
3TA—B. E. Hardinge, 53 Waurinna Rd., Horsham
3TD—T. A. Dale, 56 Edward St., Sandringham S.8
3TM—A. H. Buck, 459 Burwood Rd., Hawthorn E.2
3UW—J. A. Burrage, 12 Terry St., Deepdene E.8
3WC—W. Cavanagh, 69 Douglas Parade, Williamstown W.16
3YX—B. N. K. Hardie, 3A Bowen Crescent, Melbourne S.C.2
3ZZ—G. S. McLeod, 117 Clarence St. Geelong West

QUEENSLAND

4AB—W. F. Bardin, Archer St., South Townsville
4BS—G. F. Grummit, Hunt St., Hamilton
4CB—A. H. Caswell, Fryar St., Murgon
4DO—H. L. Hobler, 202 Campbell St., Rockhampton
4EL—E. J. Lake, 47 William St., Kangaroo Point, Brisbane
4GL—T. A. Todd, Hayman Island, Via Proserpine
4HJ—A. A. McKenzie, Mountjoy Terrace, Manly
4JF—J. C. Files, 43 Rialto St., Coorpooroo
4JJ—J. Jordan, C/o Wyper Bros., Bundaberg
4JR—S. A. McMurtrie. Cr. Tweed Lane and Hilton Rd. Gympie
4KL—I. U. Johnson, 20 Shields St., Cairns
4KM—A. H. Llewellyn, Ayr Radio Co., Queen St., Ayr
4KO—N. V. Hart, 67 Glebe Rd. Newton, Ipswich
4KP—A. W. Munro, 17th. St., Home Hill
4LK—V. L. Kerr, P. O. Box 103, Cloncurry
4LP—G. Chisholm, C/o Bickle's Radio Service, King St. Warwick
4ND—N. L. Dahl, Airdmillan Rd., Ayr
4RM—R. C. Meadows, 20 North Avenue, Mackay
4RQ—R. W. Rose, Eagle St., Longreach
4SS—I. L. Bentzen, 971, Ann St., Valley
4ST—S. H. Tumbridge, McGregor St., Woodend, Ipswich
4TS—E. W. Shorten, 11 Wilden St., Paddington
4UK—H. V. Hershel, Westminster Rd., Indooroopilly
4WB—W. J. Berry, Wingarra and Crichton Sts., Yerongapilly
4XV—F. J. Stirk, 26 Fernberg Rd., Milton
4ZL—R. M. Cameron, Post Office, Yeppoon, Via Rockhampton

SOUTH AUSTRALIA

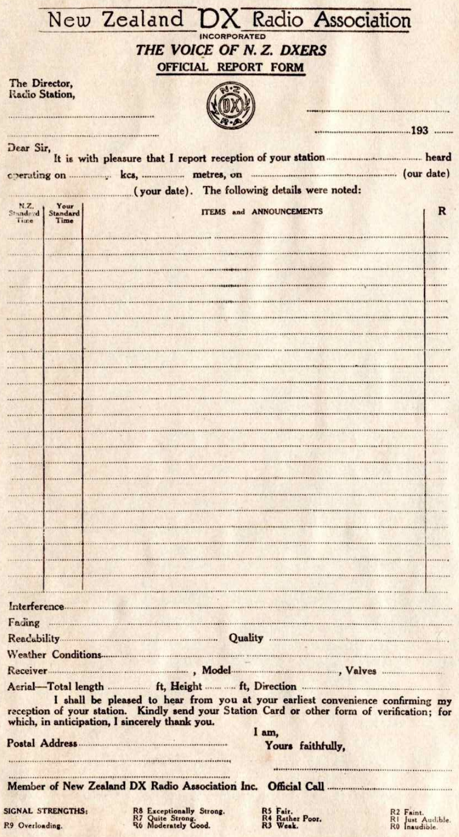
5AT—A. W. Taylor, 14 Avenue Rd., Unley Park
5BA—R. M. Barker, 57 Newbon St., Prospect
5BX—A. L. Saunders, Wakefield St., Adelaide
5BY—D. R. Whitburn, 14 Sprod Ave., Toorak Gardens
5DR—P. W. Deer, 9 Arundel Rd., Brighton
5JC—E. J. Cawthron, Flat No. 1, 18 Flinders St., Kent Town
5JO—A. A. Reimann, 12 King William St., Kent Town
5KL—C. H. Castle, 21 Harrington St., Prospect
5MH—R. Baty, 6 Manton St., Hindmarsh
5MX—C. R. White, 69 Curran St., Kilkenny
5NR—N. W. Roberts, 11 Ninth Ave., St. Peters
5SL—L. V. Fiedler, Blyth Terrace, Moonta

WEST AUSTRALIA

6BO—A. E. Grey, 40 Archdeacon St., Nedlands
6FH—F. A. Hull, 91 Adelaide Terrace, Perth
6FT—F. T. Tredea, 43 Weld St., Northam
6JT—J. Treloar, Canning Rd., Melville
6KB—V. L. Dook, 33 Egina St., Mount Hawthorn
6KM—A. Saar, C/o Station 6WF, Wanneroo
6KR—V. F. Bell, 135 Hay St., Subiaco
6LK—A. W. Read, C/o Station 6AM, Northam
6NJ—N. B. Johnston, 101 Rosalie St., Subiaco
6NO—N. E. Turnbull, 21 Harvey Rd., Shenton Park
6RL—R. F. Henwood, 24 Langsford St., Claremont
6RT—R. L. Trunfull, Government School, Baldivis, Via Peel Estate

TASMANIA

7BJ—J. Brown, 22 Cromwell St., Battery Point
7CD—C. W. Smyth, 7 George St., Devonport
7RY—F. E. Nicholls, 15 Alexander St., Burnie
7XW—C. A. Cullinan, Ulverstone



New Zealand DX Radio Association
INCORPORATED
THE VOICE OF N. Z. DXERS
OFFICIAL REPORT FORM

The Director,
Radio Station,

....
....

....
....193 ......

Dear Sir,

It is with pleasure that I report reception of your station .... heard operating on .... kcs, ... metres, on .... (our date) .... (your date). The following details were noted:

N.Z. Standard Time	Your Standard Time	ITEMS and ANNOUNCEMENTS	R

Interference ....
Fading ....
Readability .... Quality ....
Weather Conditions ....
Receiver ...., Model ...., Valves ....
Aerial—Total length .... ft, Height .... ft, Direction ....

I shall be pleased to hear from you at your earliest convenience confirming my reception of your station. Kindly send your Station Card or other form of verification; for which, in anticipation, I sincerely thank you.

I am,
Yours faithfully,

Postal Address ....
....
....
Member of New Zealand DX Radio Association Inc. Official Call ....

SIGNAL STRENGTHS:
R9 Overloading.
R8 Exceptionally Strong.
R7 Quite Strong.
R6 Moderately Good.
R5 Fair.
R4 Rather Poor.
R3 Weak.
R2 Faint.
R1 Just Audible.
R0 Inaudible.

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for listening in the wee small hours

Men's warm dressing gowns—special heavyweight cloths in a big variety of new attractive checks, contrasting collars and cuffs, 39/6, 42/-, to 95/-.

Men's winceyette pyjamas, good, strong cloth in new stripes. Full, comfortable cut, 6/11. Suede finish winceyette—specially soft, 8/11.

Scotch Union cloth—warm wool and cotton mixture, 14/6.

Men's check camel-hair buckle-boots---real comfort for cold toes. Felt and leather soles, (B4606) 8/6.

HALLENSTEIN BROS LTD
HB
NEW ZEALAND

Check Camel-hair Albert slippers, (B4603) 6/6

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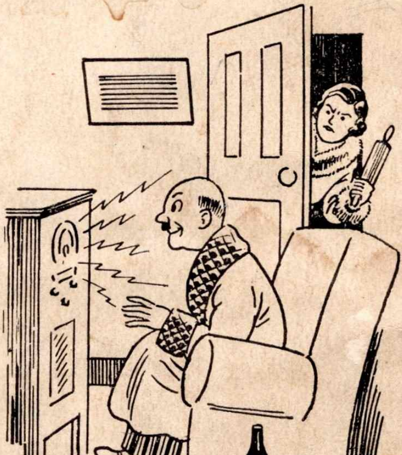
HALLENSTEIN BROS. LTD.

30 BRANCHES - ONE NEAR YOU!



COLUMBUS RADIO

NEW ZEALAND BROADCAST STATIONS

Station	Location	Kilo-cycles
1YA	Auckland	650
1YX	Auckland	880
1ZB	Auckland	1070
1ZM	Auckland	1250
2ZJ	Gisborne	980
2ZM	Gisborne	1180
2YH	Napier	760
2YB	New Plymouth	810
2ZA	Palmerston Nth.	1400
2YA	Wellington	570
2YC	Wellington	840
2YD	Wellington	990
2ZB	Wellington	1130
2YN	Nelson	920
3ZR	Greymouth	940
3YA	Christchurch	720
3YL	Christchurch	1200
3ZB	Christchurch	1430
4YA	Dunedin	790
4YO	Dunedin	1140
4ZB	Dunedin	1280
4ZD	Dunedin	1010
4YZ	Invercargill	680
5ZB	Mobile Station	1360

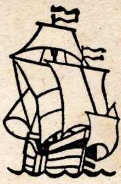
AUSTRALIAN BROADCAST STATIONS

The numeral of each call-sign indicates the State in which the station is located—thus: 2=N.S.W., 3=Victoria, 4=Queensland, 5=South Australia, 6=Western Australia, 7=Tasmania.

Station	Location	Kilo-cycles
2CR	Central Reg.	550
6WA	S.W. Reg.	560
2BH	Broken Hill	570
3WV	Western Reg.	580
7ZL	Hobart	600
2FC	Sydney	610
3AR	Melbourne	620
4QN	North Reg.	630
5CK	South Reg.	640
2DU	Dubbo	660
2CO	Riverina Reg.	670
2HR	Singleton	680
6WF	Perth	690
2NR	North Rivers	700
7NT	North Reg.	710
6GF	Goldfields	720
5CL	Adelaide	730
2BL	Sydney	740
4QS	Darling Down	760
3LO	Melbourne	770
2KA	Katoomba	780
6WN	Perth	790
4QG	Brisbane	800
5RM	Renmark	810
3GI	Gippsland	830
2CY	Canberra	850
4GR	Toowoomba	860
7HO	Hobart	860
2GB	Sydney	870
3UL	Warragul	880
6PR	Perth	880
5AN	Adelaide	890
2LM	Lismore	900
4RK	Rockhampton	910
2XL	Cooma	920
4VL	Charleville	920
3UZ	Melbourne	930
4QR	Brisbane	940
2UE	Sydney	950
5DN	Adelaide	960
3BO	Bendigo	970
2KM	Kempsey	980
2GZ	Orange	990
4MB	Maryborough	1000
4CA	Cairns	1000
7EX	Launceston	1000
3HA	Hamilton	1010
2KY	Sydney	1020
3DB	Melbourne	1030
5PI	Crystal Brook	1040
2CA	Canberra	1050
4SB	Kingaroy	1060
2RG	Griffith	1070
2LT	Lithgow	1080
4RO	Rockhampton	1080
7HT	Hobart	1080
3LK	Lubeck	1090
4LG	Longreach	1100
7LA	Launceston	1100
2UW	Sydney	1110
4BC	Brisbane	1120
2AD	Armidale	1130
6ML	Perth	1130
2HD	Newcastle	1140
2WG	Wagga	1150
7ZR	Hobart	1160
2NZ	Inverell	1170
3KZ	Melbourne	1180
2CH	Sydney	1190
5KA	Adelaide	1200
2GF	Grafton	1210
4AK	Oakey	1220
2NC	Hunter River	1230
3TR	Sale	1240
3SR	Shepparton	1260
2SM	Sydney	1270
3AW	Melbourne	1280
4BK	Brisbane	1290
2TM	Tamworth	1300
5AD	Adelaide	1310
3BA	Ballarat	1320
3SH	Swan Hill	1330
2LF	Young	1340
3GL	Geelong	1350
3MA	Mildura	1360
2MO	Gunnedah	1370
4BH	Brisbane	1380
2GN	Goulburn	1390
4MK	Mackay	1390
6PM	Fremantle	1390
2PK	Parkes	1400
2KO	Newcastle	1410
3XY	Melbourne	1420
2WL	Wollongong	1430
2QN	Deniliquin	1440
2MG	Mudgee	1450
2CK	Cessnock	1460
2MW	Murwillumbah	1470
3CV	Charlton	1470
2AY	Albury	1480
2BE	Bega	1490
2BS	Bathurst	1500
3AK	Melbourne	1500

THE HOUSEHOLDER: POSTAGE PAID. F. 272 B

LIST OF WORLD SHORTWAVE-STATIONS



All these stations have been heard at one time or another in New Zealand. Naturally, reception depends upon the time of listening, the atmospheric conditions, the aerial system and location of the radio, and therefore no one can expect to hear all these stations all the time. One thing we can say—COLUMBUS RADIO will do its job under the most unfavourable conditions. It outperforms all others.

Call Sign	Location	Metre Band	Kilocycles
	ABYSSINIA		
12AA	Addis Abbaba	31	9650
	ALGERIA		
TPZ	Algiers	25	12120
	ARGENTINE		
LRX	Buenos Aires	31	9660
LRA1	Buenos Aires	31	9690
LRU	Buenos Aires	19	15290
LRA5	Buenos Aires	16	17830
	AUSTRALIA		
VLR	Melbourne	31	9580
VLQ	Sydney	31	9615
VLW2	Perth	31	9650
VLW4	Perth	31	9665
VLQ5	Sydney	31	9680
VLR6	Melbourne	25	11830
VLW3	Perth	25	11830
VLR7	Melbourne	25	11840
VLR3	Melbourne	25	11850
VLQ2	Sydney	25	11870
VLQ7	Sydney	25	11880
VLQ8	Sydney	16	17800
	BELGIAN CONGO		
OQ2AA	Leopoldville	19	15175
	BOLIVIA		
CP43	Tupiza	19	15165
	CANADA		
CJRX	Winnipeg	25	11720
	CHILE		
CB-970	Valparaiso	31	9730
CB-1170	Santiago	25	11700
CB-1174	Santiago	25	11740
CB-1180	Santiago	25	11945
	CHINA (Non-Occupied)		
XGOY	Chungking	31	9500
XGOY	Chungking	31	9635
XGOX	Chungking	31	9720
XGOY	Chungking	25	11900
XGOX	Chungking	19	15190
XGOX	Chungking	16	17800
	CHINA (Under Japanese Occupation)		
XGOK	Canton	25	11650
XMHA	Shanghai	25	11885
XGRS	Shanghai	25	12030
FFZ	Shanghai	25	12090
	COLOMBIA		
HJAG	Barranquilla	31	9810
	COSTA RICA		
TIPG	San Jose	31	9620
T14-NRH	Heredia	31	9690
	CUBA		
COCM	Havana	31	9825
COCY	Havana	25	11470
COGF	Havana	25	11800
	EIRE		
EIRE	Athlone	16	17840
	FIJI ISLANDS		
VPD2	Suva	31	9535
	FINLAND		
OFD	Lahti	31	9500
OFE	Lahti	25	11780
OIE	Lahti	19	15190
	FRANCE (Under German Occupation)		
	Paris	31	9520
TPB11	Paris	31	9550
TPC-23	Paris	31	9680
TPC-8	Paris	25	11845
TPA-3	Paris	25	11885
	Paris	19	15240

Call Sign	Location	Metre Band	Kilocycles
	FRENCH EQUATORIAL AFRICA		
FZ1	Brazzaville	25	11965
	FRENCH INDO CHINA		
	Saigon	31	9675
	Saigon	25	11780
	FRENCH MOROCCO		
CNR2	Rabat	25	11940
	HAWAII		
KHE	Kahuku	16	17950
	GERMANY		
DJN	Berlin	31	9540
DJA	Berlin	31	9560
DXB	Berlin	31	9610
DJW	Berlin	31	9650
DJX	Vienna	31	9675
German Freedom Station		31	9804
DXB2	Berlin	25	11740
DJD	Berlin	25	11770
DJZ	Berlin	25	11800
DXW	Prague	25	11840
DJP	Berlin	25	11855
DXE	Berlin	25	12130
DJL	Berlin	19	15110
DJB	Berlin	19	15200
DJQ	Berlin	19	15280
DJR	Berlin	19	15340
DZG	Berlin	19	15360
DJF	Berlin	16	17760
	GREAT BRITAIN		
GRU	London	31	9450
GSB	London	31	9510
GSC	London	31	9580
GRY	London	31	9600
GRX	London	31	9690
GSD	London	25	11750
GSN	London	25	11820
GSE	London	25	11860
GSF	London	19	15140
GSO	London	19	15180
GSI	London	19	15260
GSP	London	19	15310
GSG	London	16	17790
GSV	London	16	17810
	GREECE (Under Italian Occupation)		
SVJ	Athens	31	9825
	GUATEMALA		
TGWA	Guatemala City	31	9685
TG5J5	Guatemala City	25	11440
TGWA	Guatemala City	19	15170
	HOLLAND (Under German Occupation)		
PCJ2	Huizen	19	15220
PCV	Amsterdam	16	18065
	HONG KONG		
ZBW3	Hong Kong	31	9525
	INDIA		
VUC2	Calcutta	31	9528
VUB2	Bombay	31	9550
VUM2	Madras	31	9570
VUD3	Delhi	31	9590
VUD4	Delhi	25	11830
VUD3	Delhi	19	15290
	IRAN		
EQC	Teheran	31	9680
EPB	Teheran	19	15100
	IRAQ		
HNF	Bagdad	31	9820

Call Sign	Location	Metre Band	Kilo-cycles
ITALY			
2RO3	Rome	31	9630
2RO9	Rome	31	9665
2RO18	Rome	31	9760
1RF	Rome	31	9815
IQY	Rome	25	11700
2RO15	Rome	25	11760
2RO4	Rome	25	11810
2RO7	Rome	19	15240
2RO6	Rome	19	15300
2RO20	Rome	16	17780
2RO8	Rome	16	17820
JAPAN			
JLG2	Tokio	31	9505
JZI	Tokio	31	9535
JIE2	Tokio	31	9695
JVW3	Tokio	25	11725
JZJ	Tokio	25	11800
JVZ2	Tokio	25	11815
JLG4	Tokio	19	15105
JZK	Tokio	19	15160
JLS2	Tokio	16	17845
JAVA			
YDB	Soerabaya	31	9550
YDC	Bandoeng	19	15150
YDB	Soerabaya	19	15315
LEAGUE OF NATIONS (Radio Nations)			
HBO	Geneva	25	11400
HBH	Geneva	16	18450
LORENCO MARQUEZ			
CR7-BE	Lorenco Marquez	31	9710
MALAY STATES			
ZHP	Singapore	31	9700
MANCHUKUO			
MTCY	Hsinking	31	9545
MTCY	Hsinking	25	11775
MARTINIQUE			
	Fort de France	31	9705
MEXICO			
XEWW	Mexico City	31	9500
XEFT	Veracruz	31	9543
XETA	Monterrey	31	9555
XEQQ	Mexico City	31	9680
XEBR	Mexico City	25	11820
NEWFOUNDLAND			
VONG	St. Johns	31	9475
NORWAY			
LLH	Oslo	31	9645
LKQ	Oslo	25	11735
PANAMA			
HP5J	Panama City	31	9610
HP5A	Panama City	25	11700
HP5G	Panama City	25	11780
PAPAL STATE			
HVJ	Vatican City	31	9550
HVJ	Vatican City	31	9660
HVJ	Vatican City	25	11740
HVJ	Vatican City	19	15120
PARAGUAY			
ZP14	Villarica	25	11720
PERU			
OAX6D	Lima	31	9500
OAX4K	Lima	31	9558
OAX4T	Lima	31	9562
OAX4R	Lima	19	15150
POLAND (Under German Occupation)			
DXH2	Warsaw	19	15120
PHILIPPINE ISLANDS			
KZIB	Manila	31	9500
KZRM	Manila	31	9570
KZRH	Manila	31	9635
KZRH	Manila	25	11890
PORTUGAL			
CSW7	Lisbon	31	9740
CSW5	Lisbon	25	11840
CSW4	Lisbon	19	15220
SAN SALVADOR			
YSM	San Salvador	25	11720

Call Sign	Location	Metre Band	Kilo-cycles
SOUTH AFRICA			
ZRG	Pretoria	31	9523
ZRL	Cape Town	31	9615
ZRO	Durban	31	9750
SPAIN			
EAQ	Madrid	31	9860
SWEDEN			
SBU	Motala	31	9535
SBP	Motala	25	11705
SBT	Motala	19	15155
SWITZERLAND			
Radio Suisse	Schwartzenburg	25	11870
THAILAND			
HSP8	Bangkok	31	9510
HSP5	Bangkok	25	11715
TURKEY			
TAP	Ankara	31	9465
TAQ	Ankara	19	15195
URUGUAY			
CXA8	Montevideo	31	9640
CXA19	Montevideo	25	11705
CXA14	Montevideo	25	11825
U.S.A.			
WGEO	Schenectady	31	9530
WLWO	Cincinnati	31	9590
WCBX	New York	31	9650
KGEI	San Francisco	31	9670
WRCA	New York	31	9670
WLWO	Cincinnati	25	11710
WRUL	Boston	25	11730
WRUW	Boston	25	11790
WCBX	New York	25	11830
WRUW	Boston	19	15130
WLWO	Cincinnati	19	15250
WCAB	Philadelphia	19	15270
KGEI	San Francisco	19	15330
WGEA	Schenectady	19	15330
WRUL	Boston	19	15350
WRUL	Boston	16	17750
WNBI	New York	16	17780
WCBX	New York	16	17830
U.S.S.R.			
	Moscow	31	9500
	Moscow	31	9520
	Moscow	31	9550
	Khabarovsk	31	9565
	Moscow	25	9600
	Moscow	25	11500
	Moscow	25	11725
	Moscow	25	11765
	Moscow	25	11830
	Moscow	25	12000
	Moscow	19	15040
	Moscow	19	15180
	Moscow	16	17910
YUGOSLAVIA (Under German Occupation)			
YUF	Belgrade	31	9505
YUB	Belgrade	19	15240

We regret that war economy obliges us to use inferior printing paper, so we have printed a limited quantity of lists on white card for listeners who desire a more durable list.

FREE OF CHARGE from any

COLUMBUS RADIO CENTRE

WORLD SHORTWAVE STATIONS (in order of Frequency)

31 METRE BAND

Call Sign	Location	Kilo-cycles
GRU	London	9450
TAP	Ankara	9465
VONG	New'dl'd	9475
XGOY	Chungking	9500
OFD	Finland	9500
XEWW	Mexico	9500
OAX6D	Peru	9500
KZIB	Manila	9500
—	Moscow	9500
JLG2	Tokio	9505
YUD	Belgrade	9505
GSB	London	9510
HSP8	Thailand	9510
—	Paris	9520
—	Moscow	9520
ZRG	S. Africa	9523
ZBW3	Hong Kong	9525
VUC2	Calcutta	9528
WGEO	Schenectady	9530
VPD2	Suva	9535
JZI	Tokio	9535
SBU	Sweden	9535
DJN	Berlin	9540
XEFT	Mexico	9543
MTCY	Manchukuo	9545
TPBII	Paris	9550
VUB2	Bombay	9550
YDB	Java	9550
HVJ	Vatican	9550
—	Moscow	9550
XETA	Mexico	9555
OAX4K	Peru	9558
DJA	Berlin	9560
OAX4T	Peru	9562
—	Khabarovsk	9565
VUM2	Madras	9570
KZRM	Manila	9570
GSC	London	9580
VLR	Melbourne	9580
VUD3	Delhi	9590
WLWO	Cincinnati	9590
GRY	London	9600
—	Moscow	9600
DXB	Berlin	9610
HP5J	Panama	9610
VLQ	Sydney	9615
ZRL	S. Africa	9615
TIPG	Costa Rica	9620
2RO3	Rome	9630
XGOY	Chungking	9635
KZRH	Manila	9635
CXA-8	Montevideo	9640
LLH	Norway	9645
12AA	Abyssinia	9650
VLW2	Perth	9650
DJW	Berlin	9650
WCBX	New York	9650
LRX	Argentine	9660
HVJ	Vatican	9660
VLW4	Perth	9665
2RO9	Rome	9665
KGEI	'Frisco	9670
WRCA	New York	9670
—	Saigon	9675
DJX	Vienna	9675
VLQ5	Sydney	9680
TPC23	Paris	9680
EQC	Iran	9680
XEQQ	Mexico	9680
TGWA	Guatemala	9685
LRA1	Buenos Aires	9690
T14NRH	Costa Rica	9690
GRX	London	9690
JIE2	Tokio	9695
ZHP	Singapore	9700
—	Martinique	9705
CR7BE	Lor. Marquez	9710
XGOX	Chungking	9720
CB970	Chile	9730
CSW7	Lisbon	9740
ZRO	S. Africa	9750
2RO18	Rome	9760
German	Freedom	9804
HJAG	Colombia	9810
IRF	Rome	9815
HNF	Iraq	9820
COCM	Cuba	9825
SVJ	Greece	9825
EAQ	Spain	9860

25 METRE BAND

Call Sign	Location	Kilo-cycles
HBO	Geneva	11400
TG5J5	Guatemala	11440
COCY	Cuba	11470
—	Moscow	11500
XGOK	Canton	11650
CB-1170	Chile	11700
IQY	Rome	11700
HP5A	Panama	11700
SBP	Sweden	11705
CXA19	Uruguay	11705
WLWO	Cincinnati	11710
HSP5	Thailand	11715
CJRX	Canada	11720
ZP14	Paraguay	11720
YSM	S. Salvador	11720
JVW3	Tokio	11725
—	Moscow	11725
WRUW	Boston	11730
LKQ	Norway	11735
CB-1174	Chile	11740
DXB2	Berlin	11740
HVJ	Vatican	11740
GSD	London	11750
2RO15	Rome	11760
—	Moscow	11765
DJD	Berlin	11770
MTCY	Manchukuo	11775
OFE	Finland	11780
—	Saigon	11780
HP5G	Panama	11780
WRUW	Boston	11790
COGF	Cuba	11800
DJZ	Berlin	11800
JZJ	Tokio	11800
2RO4	Rome	11810
JVZ2	Tokio	11815
GSN	London	11820
XEBR	Mexico	11820
CXA14	Uruguay	11825
VLR6	Melbourne	11830
VLW3	Perth	11830
VUD4	Delhi	11830
WCBX	New York	11830
—	Moscow	11830
VLR7	Melbourne	11840
DXW	Prague	11840
CSW5	Lisbon	11840
TPC8	Paris	11845
VLR3	Melbourne	11850
DJP	Berlin	11855
GSE	London	11860
VLQ2	Sydney	11870
—	Switzerland	11870
VLQ7	Sydney	11880
XMHA	Shanghai	11885
TPA3	Paris	11885
KZRH	Manila	11890
XGOY	Chungking	11900
CNR2	Fr. Morocco	11940
CB-1180	Chile	11945
FZI	Fr. Equat. Africa	11965
—	Moscow	12000
XGRS	Shanghai	12030
FFZ	Shanghai	12090
TPZ	Algiers	12120
DXE	Berlin	12130

19 METRE BAND

Call Sign	Location	Kilo-cycles
—	Moscow	15040
EPB	Iran	15100
JLG4	Tokio	15105
DJL	Berlin	15110
HVJ	Vatican	15120
DXH2	Warsaw	15120
WRUW	Boston	15130
GSF	London	15140
YDC	Java	15150
OAX4R	Peru	15150
SBT	Sweden	15155
JZK	Tokio	15160
CP43	Bolivia	15165
TGWA	Guatemala	15170
OQ2AA	Bel. Congo	15175
GSO	London	15180
—	Moscow	15180
XGOX	Chungking	15190
OIE	Finland	15190
TAQ	Ankara	15195
DJB	Berlin	15200
PCJ2	Holland	15220
CSW4	Lisbon	15220
YUF	Belgrade	15240
—	Paris	15240
2RO7	Rome	15240
WLWO	Cincinnati	15250
GSI	London	15260
WCAB	Philadelphia	15270
DJQ	Berlin	15280
LRU	Argentine	15290
VUD3	Delhi	15290
2RO6	Rome	15300
GSP	London	15310
YDB	Java	15315
KGEI	'Frisco	15330
WGEA	Schenectady	15330
DJR	Berlin	15340
WRUL	Boston	15350
DZG	Berlin	15360

16 METRE BAND

Call Sign	Location	Kilo-cycles
WRUL	Boston	17750
DJE	Berlin	17760
2RO20	Rome	17780
WNBI	New York	17780
GSG	London	17790
VLQ8	Sydney	17800
XGOX	Chungking	17800
GSV	London	17810
2RO8	Rome	17820
LRA5	Argentine	17830
WCBX	New York	17830
EIRE	Eire	17840
JLS2	Tokio	17845
—	Moscow	17910
KHE	Hawaii	17950
PCV	Holland	18065
HBH	Geneva	18450

TOLAN PRINT

* F 272. B

Shortwave Listening Vastly Improved

Columbus Calibrated Bandspread
Model "75"

Shortwave listening has for years been marred by the difficulty, uncertainty and disappointments encountered by the listener in tuning to shortwave programmes.

To eliminate tuning difficulties and reduce shortwave reception to the ease and simplicity of selecting local YA or ZB programmes has for long been the dream of radio engineers.

NOW COLUMBUS HAS ACHIEVED THIS WITH THE DEVELOPMENT OF CALIBRATED BANDSPREAD TUNING.

By spreading the shortwave bands, the hair-breadth tuning of overseas stations has been expanded to a comfortable pointer swing —20 times broader than formerly. **Indeed, Daventry, New York, etc., are, if anything, tuned with more ease than New Zealand's YA stations.**

In addition, the shortwave bands on the dial have been precisely calibrated. That is to say, the dial has been so marked that the listener can select and identify any overseas station by consulting a station list. San Francisco, for example, transmits on 9670 kilocycles according to the lists. It will be found at 9670 on the Calibrated Dial.

We will freely, and without any obligation on your part, demonstrate this radio in your home and leave it with you for a few days.

You will find that Model "75" is SUPERIOR TO ANY OTHER RADIO IN EXISTENCE.

* * * *

TIME GUIDE

For the duration of the war New Zealand is adhering to Summer Time. The following list gives the relationship of principal countries to our time.

Greenwich Mean Time	12	hours	BEHIND	N.Z.S.T.
Australia—Eastern	2	"	"	"
Central	2½	"	"	"
Western	4	"	"	"
China—Coastal	4	"	"	"
France	12	"	"	"
Germany	11	"	"	"
India	6½	"	"	"
Italy	11	"	"	"
Japan	3	"	"	"
Mexico	18	"	"	"
Java	4½	"	"	"
Spain	12	"	"	"
Sweden	11	"	"	"
South Africa	10	"	"	"
U.S.A.—Atlantic	16	"	"	"
Pacific	20	"	"	"
U.S.S.R.—Moscow	9	"	"	"

COLUMBUS RADIO SERVICE

When and Wherever You need it

The issuing of lists and radio information is only one aspect of the service which the Columbus organisation offers New Zealand listeners.

Repair or adjustment of all makes of radio, aerial installations, elimination of power-line interference, hire of radios, advice or information on all radio matters, and finally, demonstration and installation of new radio — all these are functions which the Columbus organisation fulfills with unequalled thoroughness.

Through the splendidly-equipped Radio Centres of the cities and large provincial towns or through their associated representatives of the smaller towns and villages, the radio listener has at his call the services of New Zealand's only **specialist radio organisation.** From the smallest to the largest, every town is **directly served by radio technicians who have had years of training and experience in the Columbus factory at Wellington, and whose ability has been proven in the practical work of radio manufacture.**

That is what makes possible the Columbus policy of GUARANTEED SATISFACTION. And that is a **positive guarantee.** No matter what the cost to the organisation, everything that Columbus undertakes will be done to the client's satisfaction in **price, efficiency and thoroughness.**

THERE IS ONLY ONE NATIONAL ORGANISATION DEVOTED EXCLUSIVELY TO THE REQUIREMENTS OF RADIO LISTENERS.

- **FOR REPAIRS**
- **FOR RENOVATIONS**
- **FOR YOUR NEW RADIO**

COLUMBUS RADIO

RELIABLE SKILLED. EFFICIENT COURTEOUS

and above all SCRUPULOUSLY FAIR

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